Rhode Island Title V MCH Needs Assessment

"The mission of the Rhode Island Department of Health Maternal and Child Health Program is to build integrated systems that support health, growth, and development for all maternal and child health populations, including children with special health care needs."

2010

RHODE ISLAND DEPARTMENT OF HEALTH

The Title V Maternal and Child Health (MCH) needs assessment is a critical component and a requirement of the Title V MCH Block Grant. The importance of the work behind this document represents Rhode Island's commitment to our MCH (Title V) program and can be viewed as part of the State's ongoing planning efforts. The assessment also helps to serve as a resource for local, State, and Federal partners that will focus attention on our priorities and assist in identifying opportunities for on-going and future partnerships and collaborative activities designed to improve the health of families, mothers, and children.

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The Rhode Island Department of Health's Maternal and Child Health (Title V) program is based within the Division of Community, Family Health, and Equity (CFHE). Equity, the social and environmental determinants of health, life course approach, and integration of programs are the four pillars of the CFHE's new approach to public health and have guided the development of Rhode Island's Title V Program.

The RI Department of Health used the information gathered from the community meetings, the analysis of the data from the various sources available to the department and its experience in the implementation of its maternal and child care services from prior years to select its program priorities for the next five years. From this combination of quantitative and qualitative information, the CFHE identified priorities in 2010. There is a consensus evolving from the data, the community meetings, as well as input from various partnerships, that an important program priority is Access to Care through the medical home. The components of the medical home emphasize primary care with a strong focus on care coordination, preventive care, and an emphasis on healthy lifestyles.

The CFHE will discuss how its new priorities, national performance measures, new state performance measures, and program activities relate to the four levels of MCH services and all MCH population groups in detail in the FY11 Title V MCH Application.

PREGNANT WOMEN AND MOTHERS

Pregnancies

- Provisional 2009 data indicate the declining trend in the number of pregnancies among Rhode Island residents has continued to decrease. Between 2008 and 2009 the number of pregnancies decreased by 4.7%, from 16,192 in 2008 to 15,423 in 2009. Between 1999 and 2009, the number of births decreased by 7.7% from 12,364 to 11,416.

Cesarean Section Deliveries

- Data indicate that the C-section rate decreased slightly in Rhode Island from a recent high of 33.4% in 2008 to 32.7% in 2009 (provisional data). To put this in perspective, in 2007, the cesarean rate for the nation was the highest ever reported in the United States. There were 1.4 million cesarean births in the U.S. in 2007, representing approximately one-third of all U.S. births.

Infant Mortality

- During 2008 and 2009, the number of infant deaths among Rhode Island residents was steady. Provisional 2009 data indicate that 67 infants died before their first birthday among the 11,416 resident births that year, resulting in an infant mortality rate of 5.9 per 1,000. This rate represents a 19.2% decrease from the 2007 rate of 7.3.

Preterm Births

- Preterm is the leading cause of infant mortality in Rhode Island; nationally, it is the second leading cause after birth defects. Rhode Island experienced a 7.5% decrease in its preterm rate between 2007 (12.0%) and 2008 (11.1%). Provisional data for 2009 indicate that the preterm rate in Rhode Island increased slightly to 11.3%, representing a 1.8% increase from the 2008 rate of 11.1%.

Breastfeeding

- Survey data indicate that among respondents who delivered a baby during 2008, 75% had "ever breastfed" their baby after delivery. This figure was up from 2004 when 70.9% of women said they had "ever breastfed."

CHILDREN

Lead Poisoning

- The data show a steady decline in the prevalence of lead poisoning over the last ten years, from 9.8% in 1999 to 1.6% in 2009. Although the prevalence of lead poisoning in Rhode Island has steadily declined, a total of 438 children were lead poisoned in 2009.

Children in the WIC Program

- Young children who are eligible for WIC but not enrolled are more likely to be in poor health, have developmental delays and experience food insecurity. As of September 30, 2009, 28,268 women, infants and children participated in the Rhode Island WIC Program.

Medical Home

- Compared to the nation, more children in Rhode Island have a medical home. In Rhode Island, 63.6% of children have a medical home, compared to the national rate of 57.5%.

Childhood Immunizations

- In 2009, vaccination rates among Rhode Island children 19-35 months show a precipitous drop. For the 4:3:1:3:3:1 series, there was a 29.5% decline from the previous year from 78.7% in 2008 to 55.5% in 2009. This can be explained by a shortage of the Haemophilus influenzae (Hib) vaccine. The CDC NIS estimates that about one-third of children in the 2008-2009 data were affected by the Hib shortage.

H1N1 Flu Vaccination

- According to the Centers for Disease Control (CDC) data, Rhode Island had the highest estimated influenza A (H1N1) monovalent vaccination coverage (84.7%) in 2009 for children from 6 months of age to 17 years of age. Nationally, the percentage of children vaccinated was significantly lower (36.8%) and regionally, in New England the average was 56.5%.

Childhood Obesity

- Data indicate that 14.4% of Rhode Island children aged 10-17, are obese and 15.8% are overweight. These rates are slightly lower than nationwide (16.4% obese and 15.3% overweight).

Oral Health

- In Rhode Island, comprehensive dental services are a covered benefit under Medical Assistance. As of September 30, 2009, half (51%) of the children who were enrolled in RIte Care, RIte Share, or Medicaid fee-for-service received a dental service during Federal Fiscal Year 2009.

Child Abuse and Neglect

- The Rhode Island Department of Children, Youth and Families (DCYF) has reported that during 2009, there were 2,075 indicated cases of child abuse and/or neglect, representing an 8.2% decrease since 2005, when there were 2,260 indicated cases.

Teen Risk Behaviors

- Substance abuse among high school students has declined during 2001-2009. The one exception in the data shows a 13.4% increase in students who report smoking marijuana within the past 30 days between the 2007 and 2009 surveys, up from 23.2% to 26.3%, respectively. Between 2001 and 2009, students who reported they had drunk alcohol in the past 30 days decreased by 32.4%, from 50.3% to 34.0%. A sharper decline of 46.4% was seen in tobacco use, where 13.3% of students smoked cigarettes in the past 30 days on the 2009 survey compared to 24.8% on the 2001 survey.

Teen Pregnancy

- Rates of teen pregnancies have declined during the past 15 years. In 1990, the teen pregnancy rate among 15-19 year-olds was 80.6, and by 2009 the rate dropped to 42.5.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Identification of Babies at Risk: Newborn Developmental Risk Screening

- In 2009, 6,893 (62.0%) of the Rhode Island babies screened for developmental risks, were determined to be at risk for developmental delays. This is a slight decrease from the 7,082 (60.6%) of newborns determined to be at risk for developmental factors in Rhode Island during 2008.

Home Visiting

- Newborns determined to be at risk are offered home visits and are provided referrals to services. During 2009, 6,840 babies were identified as at-risk and of these, 3,122 (45.6%) received a home visit within the first three months of birth. Recent changes in the home visiting program have resulted in a slight decline in participation due to a change in vendors, and an increase in refusals.

Early Intervention (EI)

- The number of children, aged birth to three, enrolled in the Early Intervention (EI) Program continues to rise in Rhode Island. During 2009, 3,795 children aged less than three were enrolled in the RI EI Program, representing 10% of all Rhode Island children aged less than three.

Rhode Island Pediatric Practice Enhancement Project (PPEP)

- The Pediatric Practice Enhancement Project uses parent consultants that are assigned a practice and use their knowledge to educate, advocate and assist families of children with special health care needs in accessing community resources. The number of families with children with special with health care needs served by PPEP has risen sharply from 740 in 2005 to 3,209 in 2008.

II. NEEDS ASSESSMENT

1. Process for Conducting Needs Assessment

Title V of the Social Security Act of 1935 is Federal-State partnership that focuses on improving the health and well-being of all mothers and children. The Title V Needs Assessment is a requirement of the Maternal and Child Health (MCH) Block Grant application and is a critical element of the Rhode Island's MCH program planning process. States are required to conduct comprehensive needs assessments every 5 years and to use the findings of the assessment to identify priorities and to guide resource allocation, program planning and evaluation, and on-going engagement of stakeholders.

Rhode Island uses Title V funds to design and implement a wide range of maternal and child health programs that meet national and State needs. Although Rhode Island supports programs and initiatives that are developed to meet the specific needs of the State's women and children, all 59 States and jurisdictions utilizing Title V funds, work to do the following:

- Reduce infant mortality and incidence of handicapping conditions among children
- Increase the number of children appropriately immunized against disease and the number of children in low-income households who receive assessments and follow-up diagnostic and treatment services
- Provide and ensure access to comprehensive perinatal care for women; preventa-tive and child care services; comprehensive care, including long-term care services, for children with special health care needs; and rehabilitation services for blind and disabled children under 16 years of age who are eligible for Supplemental Security Income
- Facilitate the development of comprehensive, family-centered, community-based, culturally competent, coordinated systems of care for children with special health care needs

This five year needs assessment is of paramount importance to the State. The importance of the work behind this document represents Rhode Island's commitment to our Maternal and Child Health (Title V) program and can be viewed as part of the State's ongoing planning cycle. It will explain the needs assessment process, collaboration and partnerships; a detailed description of current resources and needs; and the selection of State priorities for the next five years. The assessment also helps to serve as a resource for local, State, and Federal partners that will focus attention on our priorities and assist in identifying opportunities for on-going and future partnerships and collaborative activities designed to improve the health of mothers and children.

Rhode Island Department of Health, Division of Community, Family Health, and Equity (DCFHE)

The Rhode Island Department of Health has a long history of leadership and excellence in responding to our mission "to protect and promote the health and safety of the people in Rhode Island." The Rhode Island Department of Health's Maternal and Child Health (Title V) program is based within the Division of Community, Family Health, and Equity (DCFHE). The Division is the result of a 2008 realignment of different divisions within the Rhode Island Department of Health. The reorganization is designed to achieve better synergy, coordination, and integration of our programs.

The goal of DCFHE is to achieve health equity for all Rhode Islanders, through eliminating health disparities, assuring healthy child development, preventing and controlling disease, preventing disability, and working to make our environment healthy. Specifically, DCFHE has identified the following goals and values that guide not only activities of the Division, but specifically activities associated with this assessment:

- Work to eliminate health disparities by assuring healthy child development, and prevent and control disease and disability.
- Use a life course development approach and address the social determinants of health as a framework for health planning.
- Recognize that social, political, and economic policies and conditions determine health outcomes.
- Value the community as a core partner in public health and work to assure the equity in health is a reality.
- Plan, develop, and evaluate programs and systems of care, which are comprehensive, community-based, culturally competent, coordinated, and effective.

DCFHE is divided into six teams representing priority areas that promote synergy, collaboration, integration and coordination among programs:

Health Disparities and Access to Care Team assures equitable systems, empowers communities, and builds capacity to promote access to comprehensive, high quality services that are responsive to the needs of Rhode Island's diverse populations so they may achieve their optimal state of health.

Healthy Homes and Environment Team protects the health and safety of children, workers, and the general public by identifying and decreasing environmental hazards.

Chronic Care and Disease Management Team uses a systems approach to reduce the incidence, burden, and associated risk factors related to diabetes, asthma, cancer, heart disease and stroke to improve health outcomes.

Health Promotion and Wellness Team is committed to promoting the health and well-being of all Rhode Islanders by changing social, political, and physical environments to support healthy lifestyles. The team's focus is on obesity prevention, tobacco control, and violence and injury prevention.

Perinatal and Early Childhood Team supports healthy birth outcomes, positive early childhood development, and school readiness, and preparation for healthy productive adulthood by providing and assuring mothers, children, and adolescents access to quality maternal and child health services.

Preventive Services and Community Practices Team improves the quality of preventive care and community services through immunization, oral health, family planning services, and HIV/AIDS and Viral Hepatitis programs. This is achieved by increasing access and availability to vulnerable populations by diminishing ethnic/racial health disparities, providing performance standards, enhancing community partnerships, and applying evidence based, effective programming.

Critical in the reorganization and formation of the teams that represent the DCFHE was the development of the MCH Policy Group. This group includes the Executive Director of DCFHE, Team Leads for the six DCFHE teams, as well as program managers within those teams. The MCH Policy Group was charged with developing the vision for MCH efforts that reflects the integrative opportunities inherent in the DCFHE, as well as engaging external partners. The following mission statement represents the work of that group:

"The mission of the Rhode Island Department of Health Maternal and Child Health program is to build integrated systems that support health, growth, and development for all maternal and child health populations, including children with special health care needs."

For a detailed look at the DCFHE, as well as specific staff and programs associated with the MCH Needs Assessment leadership team please see Appendix A: *RHODE ISLAND DEPARTMENT OF HEALTH DIVISION OF COMMUNITY FAMILY HEALTH AND EQUITY 2010***.** Included in this document are:

- ✓ LETTER FROM THE EXECUTIVE DIRECTOR
- ✓ OVERVIEW OF ORGANIZATIONAL STRUCTURE
- ✓ EXECUTIVE ADMINISTRATION TEAM
- ✓ EQUITY FRAMEWORK: PRIORITIES
- ✓ WHO WE ARE, WHAT WE DO, OUR CORE VALUES
- ✓ A DETAILED DESCRIPTION OF OUR TEAMS

The DCFHE has primary responsibility for assessing the health and developmental needs of young families and children in the state, for planning effective measures to address those needs, for evaluating programs and policies affecting the health and development of women, children, and families in the state and for implementing effective measures to address those needs. During this Title V MCH comprehensive needs assessment year, the DCFHE identified new priorities informed by data collection and surveillance, family and community input, and interagency collaboration.

Methodology

Integrating the Life Course Perspective, Social and Environmental Determinants of Health, and Equity in the MCH Needs Assessment

The **life course** perspective has evolved from multidisciplinary research to provide evidence that conditions present early in life play a role in shaping the health and well-being throughout an individual's life.[1] When we talk about individuals from birth through to adulthood, middle age, and beyond, we are looking at their lives across the life course. Fundamentally, our lives are "linked" throughout each period, or phase, in life. The interaction of risk and protective factors, such as socioeconomic status, exposure to toxic environmental elements, ambient and chronic stress, health behaviors, consumption of nutritious foods, and access to quality medical care and services, all have the potential to influence health across the life course.[2]

The life course perspective offers an updated, integrated, and broader way of conceptualizing and prioritizing health care needs and services by looking at health and wellness across the life span – not as

[1] Pies C, Parthasarathy P, Kotelchuck M, Lu M. 2009. Making a Paradigm Shift in Maternal and Child Health;: A Report on the National MCH Life Course Meeting. Martinez, CA. Contra Costa Health Services.
[2] http://mchb.hrsa.gov/lifecourseresources.htm. Accessed: May 10, 2010.

disconnected stages, or separate maternal and child populations.[3] For example, a life course approach would look at birth outcomes not only as the end product of a nine month pregnancy, but also as the entire life course of a woman leading up to pregnancy. Disparities in birth outcomes, therefore, involve potential differential exposure and experiences throughout the life course leading up to pregnancy.[4] Adopting a life course perspective suggests there are critical periods for intervention, and the cumulative impact of adopting (or not adopting) any such intervention may have both short and longer-term consequences affecting maternal and child health.[5]

A fundamental principle of public health is that ALL people have a right to health, and the health of America depends on the health of ALL Americans. **Health Disparities** exist if there is a significant difference in the overall rate of disease incidence, prevalence, morbidity, mortality, or survival rates of various populations.[6] The social and economic conditions contributing to persistent disparities, many of which become evident at mid- and late life, may be anchored to earlier circumstances of the life course.[7]

Most health disparities affect groups that are disadvantaged or marginalized because of their socioeconomic status, race/ethnicity, gender, sexual orientation, disability status, geographic location, or any combination of these. People in such groups not only experience poorer health status but also tend to have less access to healthy food, good housing and safe neighborhoods, quality education, and freedom from discrimination—or the **social determinants** or conditions that contribute to good health.[8]

Health equity is when everyone, regardless of the social and economic circumstances present in their life, has the opportunity to "attain their full health potential." [9] For many people, these disadvantaged conditions are pervasive during extended periods of time in their lives, and for some, membership in a particular group lasts a lifetime. Understanding the disparities present in each of our priority populations across their respective life courses becomes critically important to knowing the needs and priorities of Title V populations as well as moving toward the goal of achieving health equity in Rhode Island.

Understanding Rhode Island's State Capacity

Agency Capacity

Chapter 23-13 of the RI General Laws (1937, 1999) designates the RI Department of Health (HEALTH) as the state agency responsible for administering the provisions of Title V of the federal Social Security Act in RI relative to MCH services. As the recipient of the state's federal Title V MCH block grant funds, HEALTH's Division of Community, Family Health & Equity (DCFHE) plays an important role in addressing the MCH needs of children

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[3] Fine A, Kotelchuck M, Adess N, Pies C. 2009. Policy Brief. A New Agenda for MCH Policy and Programs: integrating a Life Course Perspective.; Martinez, CA. Contra Costa Health Services.
[4] Ibid.
[5] Ibid.
[6] Harper S, Lynch J. Methods for Measuring Cancer Disparities: Using Data Relevant to Healthy People 2010 Cancer-Related Objectives. NCI Cancer Surveillance Monograph Series, Number 6. Bethesda, MD: National Cancer Institute, 2005. NIH Publication No. 05-5777.
[7] Pearlin, Len, Scott Schieman, Fazio & Meersman. (2005).Stress, Health, and the Life Course: Some Conceptual Perspectives. Journal of Health and Social Behavior, 46 (2). 207-211.
[8] http://www.cdc.gov/healthycommunitiesprogram /overview/healthequity.htm. Accessed: February 10, 2010.
[9] Paula Braveman. HEALTH DISPARITIES AND HEALTH EQUITY: Concepts and Measurement. Annual Review of Public Health, April 2006, Vol. 27, Pages 167-194.

including those with special health care needs and their families in RI. Assuring optimal growth and development, detecting health problems early, and instilling skills for positive healthy behaviors have beneficial effects over the life course.

As referenced above, the RI Department of Health underwent a significant reorganization in 2008. The intent was to promote synergy among programs as described in the Organizational Structure section of this application. The reorganization provided an opportunity for DCFHE to align programs to achieve better synergy, coordination and integration to meet the goal of achieving health equity for all Rhode Islanders through eliminating health disparities, assuring healthy child development, preventing and controlling disease, preventing disability, and working to make our environment healthy. Finally, the reorganization has enabled HEALTH to leverage limited resources to better address the public health needs of communities.

In order to develop and implement priorities for Rhode Island's Title V MCH Program, it is first necessary to understand the health needs of the state's entire population and the general health care delivery environment. Other issues, such as the geographical and cultural characteristics of a state and its localities (including their governmental structures) and economic and educational characteristics, also impact the health and human services needs of a population.

Equally important to this process is an understanding of the key policy issues currently being debated in Rhode Island's public arenas. Current agenda items include tax relief, health care, jobs and economic development, education, affordable housing, and welfare reform. It is important to note that the state's safety net infrastructure has been damaged by cuts made in response to the fact that Rhode Island is now in an economic recession.

DCFHE uses a life course development approach that addresses the determinants of health as its framework for health planning. Social, political and economic policies and conditions evolve and determine health outcomes. While, HEALTH has made significant progress in meeting Title V measures and Healthy People 2020 goals, disparities still exist. Therefore, proactive and applied public health strategies focus on all members of the community to eliminate health disparities in Rhode Island. It is through this collective work effort that DCFHE offers quality programs and continues to assure that all Rhode Islanders will achieve optimal health throughout the lifespan via a statewide system of services that are comprehensive, community-based, coordinated and family-centered. This approach links with the MCH needs assessment to form the basis of our work in this application.

Children and Youth with Special Health Care Needs

The Office of Special Health Care Needs (OSHCN) is the designated Title V Maternal and Child Health Office of Children with Special Health Care Needs, and is mandated to "provide and promote family-centered, community-based, coordinated care for children with special health care needs, and facilitate the development of community-based systems of services for such children and their families."

RI is a 1914 A state (i.e. all children participating in the Supplemental Security Income program receive Medicaid benefits which includes rehabilitative services). The DCFHE convenes the SSI State Team, participates in the Rhodes to Independence Medicaid Infrastructure Steering Committee, the Global Medicaid Waiver State Implementation Team, and the Family Voices Leadership Team to ensure a safety net for children eligible for SSI and their families. The Team includes representatives from the State Departments of Health, Education, Human

Services, Children, Youth and Families and other organizations such as the RI Parent Information Network, RI Family Voices, and Hasbro Children's Hospital.

The DCFHE and its OSHCN facilitates the development of community-based systems of services for CYSHCN and their families, which focuses mainly on infrastructure building activities. The DCFHE is in a unique position to advocate with families raising CYSHCN to coordinate statewide services and to provide leadership for the special needs service delivery system, especially as it relates to access to and quality of pediatric specialty services, educating children with special needs, child welfare prevention, and mental/behavioral health. DCFHE invests in the special needs infrastructure through parent support and empowerment opportunities and the provision of quality assurance through a special needs leadership council.

Assuring Culturally Competent Care

The DCFHE is committed to ensuring that services are culturally competent. RI has one of the highest percentages of foreign-born residents in the nation and 20% of RI residents are a racial or ethnic minority. Over the last ten years, DCFHE staff has become increasingly diverse. The majority of parent consultants employed through the DCFHE are from diverse backgrounds. Information and educational materials are written at or below a sixth grade reading level and most materials are available in English and Spanish, with a limited selection available in other languages (Portuguese, French, Lao, Khmer, Russian, Chinese, Hmong) based on program needs.

Reducing racial and ethnic disparities is a priority. HEALTH has been working with all its partners to raise awareness of and increase adherence to the National Standards for the Provision of Culturally and Linguistically Appropriate Services in Health Care Settings (CLAS Standards). The DCFHE supports the delivery of culturally competent care through data collection, analysis and reporting specific to racial and ethnic groups. HEALTH has a data policy that requires all departmental data sets to collect, analyze, and report data by race and ethnicity to inform program planning, professional development, and policy development. The DCFHE supports many community-based initiatives throughout RI, including in the core cities, directing resources where a large number of ethnic and racial minorities reside.

State Statutes Relevant to Title V That Insures the Ongoing Nature and Integrity of the States MCH Program

- RIGL 16-21-7 (1938, 2009) requires local schools to have a school health program including health education, health services and healthy school environment, that is approved by HEALTH and RIDE.

- RIGL 23-5-20.5 (2002) establishes standards for the maintenance of pre-1978 rental property in RI and provides property owners with access to liability coverage for lead poisoning.

- RIGL 23-1-18 (1966, 1993) authorizes HEALTH to require the reporting of immunization status for the purpose of establishing and maintaining a childhood immunization registry for children under the age of 18 years.

- RIGL 23-1-43 (1992) requires the Director of Health to establish a minority population health promotion program to provide health information, education, and risk reduction activities to reduce the risk of premature death from preventable disease in minority populations.

- RIGL 23-1-44, (1991, 2006) requires HEALTH to provide all routine vaccines for children and adults.

- RIGL 23-1-45 requires Rhode Island insurers to provide funding for vaccines for insured children and adults.

- RIGL 23-6-0 (1989) authorizes HEALTH to require HIV screening and testing of adolescents, adults and pregnant women.

- RIGL 23-1-49 (1985, 1997) authorizes HEALTH to establish and maintain registries for traumatic brain and spinal cord injuries.

- RIGL 23-13-3 (2003) creates a birth defects surveillance registry.

- RIGL 23-13-13 (1979) requires all newborns to be screened for hearing impairments.

- RIGL 23-13-14 (1987, 2001) requires all newborns to be screened for metabolic, endocrine, and hemoglobinopathy disorders.

- RIGL 23-13-16.1 (1988) requires hospitals to submit statistics relating to the annual rate of caesarian sections, primary and repeat, to HEALTH.

- RIGL 23-13-17 (1987 & 1996) designates HEALTH as the state agency for administering the provisions of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program.

- RIGL 23-13-20 (1988) authorizes HEALTH to establish a family life and sex education program to assist in the establishment of community networks in the maternal and child health planning areas with high rates of teenage pregnancy.

- RIGL 23-13-21 (1988) authorizes HEALTH to establish a payer-of-last-resort program to cover the costs of outpatient family planning counseling and comprehensive reproductive health services for men and women who are uninsured and ineligible for Medicaid in RI.

- RIGL 23-24.6 (1991) authorizes HEALTH to establish a comprehensive statewide program to reduce the prevalence of childhood lead poisoning in the state.

- RIGL 40-19.1 (1997) requires HEALTH, the RI Department of Human Services (DHS), the RI Department of Children, Youth, & Families (DCYF), and the RI Department of Education (RIDE) to develop a comprehensive statewide plan to prevent and reduce the incidence of unwanted pregnancies among adolescents in RI.

Data Sources across MCH Populations

The Division's needs assessment process is one that relies on surveillance, parent and community input, and intra-agency collaboration. Utilizing data from our Women's Health Screening and Referral Program, Universal Newborn Developmental Risk Screening (Level I) and First Connections (Home Visiting) databases provide us with a current picture of the needs of pregnant women, infants, and their families. Surveys such as the Pregnancy Risk Assessment Monitoring System (PRAMS) and Rhode Island's 2 year follow-up survey, the Toddler Wellness Overview Survey (TWOS), are additional tools to assess the experiences, behaviors, development, and/or well-being of pregnant women, mothers, and young children. Vital Records data also allow us to track maternal and child health status indicators such as entry into prenatal care, low birthweight and infant mortality.

Program databases such WIC, Lead Screening, Immunization, Early Intervention, and Birth Defects provide us with information on children. Our KIDSNET system, described throughout our Annual Report and Application, is also crucial in tracking data related to children's preventive services and for the determination of

medical home. Hospital discharge data, the Youth Risk Behavior Survey, and School Accountability for Learning and Teaching (SALT) Survey are also examples of tools used to assess the well-being of Rhode Island's youth. Utilizing these data sources allows us to determine the trends and health status of the maternal and child population.

National surveys, such as the National Survey of Children with Special Health Care Needs, National Survey of Children's Health and National Immunization Survey, provide state-level data on children including CSHCN. Our partnership with the Rhode Island Parent Information Network and Family Voices has led to the development and implementation of surveys of families of CSHCN.

In addition, working closely with the other State agencies (e.g., Human Services; Education; and Children, Youth and Families), with Rhode Island KIDS COUNT, and other community organizations provides us with a more comprehensive understanding of the well-being of children and their families and the environment in which they live. State and local partnerships as exemplified through local CATCH grants and initiatives with The Providence Plan have provided us with better information on maternal and child health at the neighborhood level.

Finally, a key part of the needs assessment process is use and integration of qualitative data obtained through the involvement of parent consultants, families and communities. Our needs assessment and the identification of emerging priorities rely heavily on parent/community input before, during, and after the Title V Application's completion. By conducting a multi-pronged needs assessment process that uses both quantitative and qualitative data, we are able to obtain a wide breadth of information, which gives us a better understanding of the maternal and child health needs of families in Rhode Island.

Data are generally summarized using the description of the theoretical framework discussed above. Combined, data are used to inform this process and allow for the State to cycle from the analysis phase to examine capacity, identifying priority needs, establishing State-negotiated performance measures, setting annual targets for National and State Performance Measures, identifying activities to address priorities, allocating resources, and monitoring progress – all of which are discussed in detail and throughout the Title V grant application, needs assessment, and annual report.

Engaging Stakeholders and Community Participation

Community participation in the needs assessment process is an important component to understanding the Maternal and Child Health needs in Rhode Island. In order to better understand the needs of the community, a combination of quantitative and qualitative examination is required. The three components of community participation in the five-year needs assessment process were: a community input meeting, nine community forums and a public hearing. Information related to state needs, capacity and priorities was collected at these meetings that included various internal and external stakeholders, other state agencies, providers, and consumers, including parents of children with special health care needs.

Community Input Meeting

The Community Input Meeting was held in partnership with RI KIDS COUNT with over 130 participants representing a diverse mix of over 40 community organizations. The invitation list for this event was an aggregation of partner lists across DCFHE. A presentation on "building equity" by the executive director of the DCFHE

provided the framework for the discussions. Participants were invited to participate in breakout sessions based on the priority population groups identified: Early Childhood, Middle Childhood, and Adolescence, Children and Youth with Special Health Care Needs (CYSHCN), Pregnant Women and Women across the Lifespan.

A population-specific data brief was created for each priority population group. These epidemiologic profiles provided a quantitative assessment of issues most relevant for each of Rhode Island's priority population groups. These data briefs were not only informative for the overall Rhode Island Department of Health MCH needs assessment team, but also served as an important tool to summarize and contextual the current state of Maternal and Child Health in Rhode Island for meeting participants. The data briefs were sent to participants via email prior to the community input meeting and included in conference packet materials. The data briefs were summarized for the participants at the beginning of the session and included indicator information/data pertaining to the following MCH areas:

- **Access and Utilization**
- **Health Status**
- **Health Practices and Behaviors**

*Please see data briefs in Appendix B.

(To see a copy of the Community Input Facilitator Guide, Please see Appendix C.)

Qualitative information was obtained during each session and summarized.

*Please see "Community Input Meeting Summary Tables" in Appendix D.

Community Forums

Nine community forums took place throughout the state at a range of settings including a women's health council, women's health advisory council, and children's advocacy organizations, with a total of over 200 participants. The community forums identified many of the same themes that the community input meeting did, including issues around access to care, gaps in mental health care, and social determinants of health.

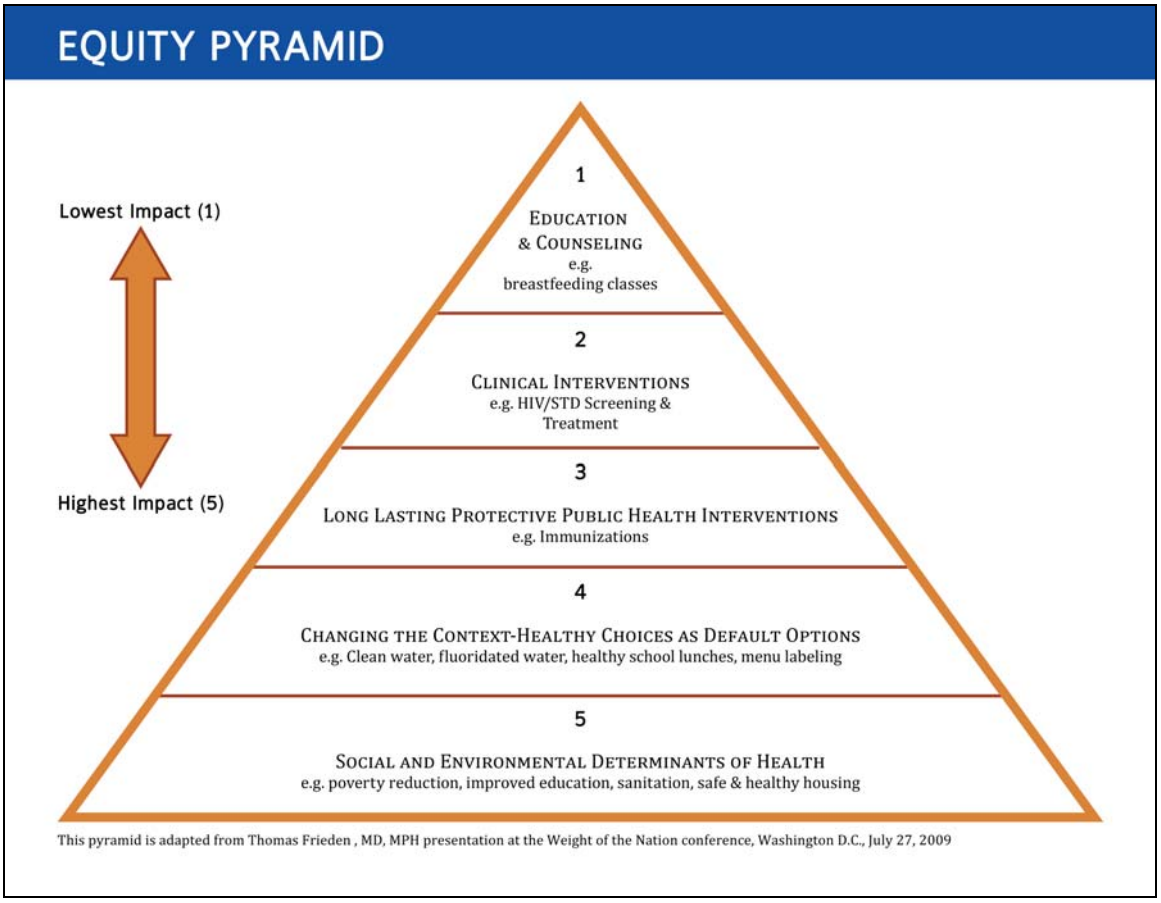
Public Hearing

A formal public hearing was held on June 21, 2010. All participants that were invited to participate in the community input event (approximately 300) received an email notice about the public hearing. Additionally, per Rhode Island State Law, the notice was posted on the RI Secretary of State's website. A summary including the national performance measures and proposed state performance measures was developed, along with a link to the full application. One member of the public attended. Additionally all members of the public were open to provide written comments to the Director of Health up to two weeks after the public hearing. There was no additional feedback received.

Strategic Planning, Resource Allocation and State Priorities

Equity, the social and environmental determinants of health, life course approach, and integration of programs are the four pillars of the CFHE's new approach to public health strategic planning. When allocating resources and making decisions on what interventions should be implemented, CFHE uses the "Equity Pyramid" (Figure 1) – adapted from Thomas Frieden, MD, MPH, presentation at the *Weight of the Nation conference*, in Washington D.C., July 27, 2009- as a tool to help prioritize its work. The "Equity Pyramid" establishes 5 levels of program impact/effectiveness from Level 1 (less impact) at the top of the pyramid to level 5 (most impact) at the bottom at the pyramid. The Equity Pyramid describes the impact of different types of public health interventions and provides a framework to improve population-level health. This pyramid represents efforts to address social determinants of health at the bottom, followed by public health interventions that change the context of health next, protective interventions with long term benefits next, direct clinical care, and at the top counseling and education. Interventions focusing on the lower levels of the pyramid tend to be more effective in reaching broader segments of society and require less individual effort. As you go up the pyramid the interventions impact the individual, but have less of an impact across the population. Interventions at each and every level are required to achieve optimal and sustained public health improvements.

Figure 1



(Source: Frieden T. A Framework for Public Health Action: The Health Impact Pyramid. Am J Public Health. 2009;100(4):590-595).

Linkages between Assessment, Capacity, and Priorities

From the needs assessment, priorities are developed based on the needs identified and matches those needs to desired outcomes, required mandates, level of existing capacity and the political priorities within the State. From the results of this process, the State selects the most important areas in which the State believes it has a reasonable opportunity to maintain, modify, or enhance existing interventions, initiatives or systems that have been successful, or begin new interventions, initiatives or systems which are expected to result in needed improvements.

After the development of the priorities, activities and projects are identified to address the priority strengths and needs through the Venture Capital Request (VCR) process. The VCR's describes the activity or project and includes required MCH information on how the VCR aligns with one or more of the set priority or priorities, type of population and type of service data, how the VCR will be measured and does it align with the application process or measures.

In addition, VCR should reflect the four pillars of Community, Family Health and Equity's (CFHE) new approach for public health: health equity, the social and environmental determinants of health, the life course approach and integrations of programs. MCH Block grant resources are allocated based on the interventions from the health equity framework.

The VCR's were submitted and reviewed for the budget period 10/1/2010 – 9/30/2011. Programs were notified if any requests required any additional information or if the VCR was approved or denied. The required information mentioned above is explained in more detail, if needed, as part of the VCR.
(*Please see Appendix E for a Complete Copy of the VCR Form.*)

Dissemination

Critical to the needs assessment process is making sure that stakeholders are aware of the overall process including the selection of MCH priorities for the State. Throughout this process partnerships and collaborations were vital to its overall success. As part of the MCH program's on-going commitment to both the process and its stakeholders reporting back is of paramount importance.

An Executive Summary is an important component of our dissemination plan. Stakeholders will be sent a copy of the summary via electronic mail. This document will be discussed and disseminated through various community and statewide meetings as it pertains to MCH priority populations. Additionally, the overall needs assessment will be made public by posting a complete searchable PDF copy on HEALTH's website. All of our stakeholders – from State and community partners to Rhode Island families – will have the opportunity the view this document and be part of the on-going needs assessment process.

Challenges Presented During the Process

This past year was marked by unprecedented challenges that affected all six teams in the Division of Community, Family Health and Equity (DCFHE): from programmatic issues, to budget constraints, workloads and job responsibilities that shifted associated with the worldwide H1N1 pandemic, ARRA new funding to states and health reform passage. Through it all, the daily contributions and commitment of staff across the division, was key to both a successful departmental response to H1N1 and meeting the division goals and expectations.

Another challenge worth noting concerns participation in our formal public hearing. As previously mentioned, a formal public hearing was held on June 21, 2010. Although approximately 300 people were invited and a notice of meeting was posted on the RI Secretary of State's website, only one member of the public attended and no additional feedback was received. This is something that we will address as we plan for future public hearings.

Our goal is to achieve health equity for all Rhode Islanders, through eliminating health disparities, assuring healthy child development, preventing and controlling disease, preventing disability, and working to make our environment healthy. While we have made significant progress towards meeting some of the Healthy People 2010 goals, we still have work to do.

*For a detailed discussion of the State of the State as it pertains to Rhode Island's Title V Program please see Appendix F.

In Summary

Results from the statewide needs assessment, state and national performance measures, capacity indicators, and community stakeholders provide a comprehensive picture of the MCH needs in Rhode Island. From this combination of quantitative and qualitative information, the DCFHE identified state priorities and associated State Performance Measures. Together, the priorities represent each of the four levels of the MCH pyramid and all MCH population groups and will be described in detail throughout this application. The capacity to address significant public health challenges at several service levels in an integrated way is the special mandate of Title V and the DCFHE is proud of its coordinated, leveraged, and evaluated investments in community care for all children and their families in Rhode Island.

Rhode Island's Title V plan for the coming year (**RIMCH'11**) addresses new state priorities identified thru the new five-year comprehensive needs assessment for the maternal and child population. Rhode Island further defined its priority populations as: early childhood, middle childhood, adolescence, children with special health care needs, pregnant women and women across the lifespan. A large public input meeting was held in March 2010. Additionally, staff gathered additional input from stakeholders through April 2010. Senior staff at the RI Department of Health utilized this information to determine state priorities moving forward. A priority was chosen to reflect progress in health status among each of the priority groups. Additionally, priorities were chosen to reflect and measure progress in integration of efforts within the RI Department of Health and with our partners, promoting the use of evidence based practices to promote health and prevent disease, and to address the social determinants of health which perpetuate disparities within the population of Rhode Island.

HEALTH will continue its work to define specifics within each of the priority needs over the course of this year (October 2010- September 2011). HEALTH will also implement an ongoing needs assessment process to continuously gather input from stakeholders on improving maternal and child health in Rhode Island. The Division of Community, Family Health and Equity (DCFHE) will continue to provide leadership, planning, and infrastructure for HEALTH efforts in responding to these priorities and assuring that families and children needs in RI are addressed.

2. Partnership Building and Collaboration Efforts

Affecting positive change in maternal, child, and family health requires a common vision and collective effort. The DCFHE enjoys strong partnerships and collaborative relationships. The DCFHE works closely with other state agencies, community providers of health services, and constituent groups to promote the healthy development of women, infants, and children, including CYSHCN.

State Agency Partnerships

There are five other state agencies that provide various services to the state's MCH populations, including CSHCN. These five agencies include the RI Department of Human Services (DHS), Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDH) (***formerly***: RI Department of Mental Health, Retardation & Hospitals (MHRH)), RI Department of Children, Youth & Families (DCYF), RI Department of Corrections (DOC), and RI Department of Education (RIDE).

The DCFHE has a number of formal interagency agreements with DHS related to Medicaid including Early Periodic Screening, Diagnosis & Treatment (EPSDT) with specific recommendations for standardized developmental screening, autism screening, adolescent transition planning, influenza vaccine for adults and non-medical case management services for persons living with AIDS. Currently the DCFHE is working with DHS to enter into another agreement to secure Costs Not Other-wised Matched by Medicaid funding for AIDS Drug Assistance Program medications for uninsured persons living with HIV/AIDS. KIDSNET Program has a data sharing agreement in place with DHS to ensure that all children receive appropriate preventive care, follow-up and services to promote healthy child development.

The DCFHE, in partnership with DHS, DCYF and community providers, supported a model of developmental services designed to increase the numbers of young children receiving comprehensive screening for a range of developmental and behavioral problems and referral to appropriate intervention and treatment services.

DCFHE staff works closely with DHS to create a statewide infrastructure for addressing childhood lead poisoning among Medicaid-eligible children with four regional Certified Lead Centers, providing comprehensive case management services and coordinated linkage to other services and supports. DHS also partially funds the Child Care Support Network (CCSN), which provides health and mental health consultation to child care providers and children in child care. The DCFHE sends monthly reports of newborns with Medicaid covered deliveries to Medicaid to facilitate prompt enrollment in RIte Care.

The DCFHE also works collaboratively with DHS in the administration of the state's care coordination system for CYSHCN (CEDARR), the provision of services through the Early Intervention program, statewide access to screening and assessment for children with complex special health care needs, and the administration of parent engagement and support activities in clinical practices (through the Pediatric Practice Enhancement Project (PPEP)). The DCFHE and DHS also jointly manage and fund the Child Care Support Network. DHS is a full partner in the implementation of Successful Start, RI's Early Childhood Comprehensive Systems initiative.

DCFHE staff works closely with DHS on the Family Voices Leadership Team (which is dedicated to removing system barriers to CYSHCN and their families). DCFHE staff also participates with the DHS Office of Child Support Services on the RI Fatherhood Coalition. DCFHE staff also coordinates with the DHS Kids Connect program which provides additional staffing so that children with special health care needs can participate in child care with typically developing peers.

DCFHE staff participated in the development of the Global Consumer Choice Compact 1115 Waiver Demonstration that was submitted to CMS in August 2008 and approved January 2009. DCFHE staff continues to participate on Waiver Implementation Workgroups as it relates to ensuring a medical home and access to screening and treatment to Medicaid recipients.

RI Department of Education (RIDE): The DCFHE has a cooperative agreement with the RI School for the Deaf for the purposes of enhancing early hearing detection and intervention (EHDI) and systemically assessing, developing, and implementing strategies for tracking children beyond age five by including school hearing screening information and results in KIDSNET. The DCFHE is also working with RIDE in an effort to share school health data with HEALTH in a manner allowed under federal education privacy laws. RIDE is also a key partner in the implementation of RI's Early Childhood Comprehensive Systems Plan.

The OSHCN collaborates with RIDE on implementing and assuring access to special education through supporting the RI Parent Information Network Resource Center, assisting families through the PPEP and providing countless workshops and technical assistance to families and school districts. RIDE partners in the implementation of the PPEP program and assists families in understanding their rights in the special education system. RIDE and OSHCN partner on autism initiatives including the screening, diagnosis and education of children and youth with autism spectrum disorders. The OSHCN is an active member of the RIDE-led Transition Council and partners on several initiatives addressing youth with special needs in transition from pediatric to adult health care. OSHCN leadership was appointed to the Special Education Advisory Council in 2009.

RIDE works with both the Division's Tobacco Control Program and its Initiative for Healthy Weight to address school settings. RIDE continues to collaborate with DFCHE on thrive, RI's coordinated school health program. Even though funding was not awarded by the CDC in 2008, the website resource is maintained for each area of coordinated school health with RIDE and DFCHE contacts as appropriate. RIDE, DCFHE, and HEALTH's Center for Data and Evaluation administer the Youth Risk Behavior Survey every other year in RI high school and middle schools. DFCHE, HEALTH's Center for Data and Evaluation and RIDE produce reports linking key health indicators and academic achievement along with reports that illustrate the disparities in health across key populations including children with physical, emotional and/or learning disabilities and children who identify as gay, lesbian, bisexual or unsure.

The DCFHE works with RIDE to ensure an integrated educational system that serves YSHCN transitioning to adulthood. DCFHE participate on the legislatively mandated Transition Council that ensures youth with special needs transition from secondary education to employment or higher education. The OSHCN and RIDE partner on implementing the Dare to Dream Youth Conference and Mentoring Program that provides youth with special needs an opportunity for leadership development and peer to peer support. The OSHCN is a newly appointed member of

the Special Education Advisory Council. The DCFHE is working with RIDE and the RI School for the Deaf to coordinate and maintain follow-up for infants identified with hearing loss, to conduct two research studies related to hearing loss, and to develop systems related to school-based hearing screening and follow-up. DCFHE works with RIDE on a broad range of health issues as it relates to academic achievement. DCFHE and HEALTH's Center for Data and Evaluation develop joint publications with RIDE on links between health and academic success. DCFHE also, works closely with RIDE to address mental health supports, tobacco control, violence prevention, and overweight/obesity prevention in school settings. Although RI's coordinated school health program, thrive, did not receive funding from the CDC, the website maintaining the contacts and resources is sustained as well as the partnership to support coordinated school health efforts.

RI Transition Council: The DCFHE continues to participate on the RI Transition Council, which was established by state statute to coordinate the activities of state agencies and school districts for youth with disabilities transitioning from school to adult life. The OSHCN is responsible for the development of an adolescent healthcare toolkit that is being used by the members of the Transition Council and their organizations, specifically, school-nurse teachers, transition coordinators, RIDE administrators, Local Education Authorities' Special Education administrators and Vocational Rehabilitation Counselors.

RI Department of Children, Youth & Families: The DCFHE is collaborating around data sharing via KIDSNET to better coordinate preventive health care for children in foster care. The DCFHE Family Outreach Program (FOP) is also working with DCYF in the implementation of new regulations regarding screening young children with substantiated cases of child abuse/neglect for Early Intervention eligibility. FOP nurse home visitors perform screening and serve as a liaison between DCYF and Early Intervention providers. DCYF is a full partner in the implementation of RI's Early Childhood Comprehensive Systems Plan. OSHCN partners with DCYF and DHS on the design and implementation of the children's behavioral health system in RI. OSHCN convenes and sponsors opportunities for family involvement and stakeholder participation in the children's behavioral healthcare system and the recently awarded Family Care and Coordinating Partnership (FCCP). The DCFHE participates on the Children's Trust Fund, which administers the state's primary and secondary prevention of abuse and neglect.

The Immunization Program (IP) established a partnership with DCYF to ensure that children in child care and preschool settings are up-to-date on their immunizations. The IP's parent consultant conducts quarterly immunization education trainings for DCYF workers as well as in-home daycare workers to educate staff about the immunization requirements for entry into daycare and preschool.

The DCFHE also has works with the RI Department of Environmental Management (DEM) to assure that public complaints about illegal exterior lead-based paint removal are addressed. The DEM assists the WIC Program in operating the Farmers Market Nutrition Program by serving as a liaison to farmers and organized farmers' markets to ensure that sales of locally grown produce to program participants are in compliance with rules and regulations as well as coordination of training.

The DCFHE has a Cooperative Agreement with the Department of Transportation to implement a Safe & Active Commuting Program to develop a sustainable state infrastructure to support active transportation for children and adults and make policy, program and environmental changes that promote safe walking and biking. The project

purchases and distributes bicycle helmets to children.

The DCFHE continues to partner with the Housing Resources Commission under an MOU to identify effective environmental health interventions at a statewide level across housing and health programs in the state. The partnership benefits families by coordinating efforts to provide healthy, safe, and affordable housing to all Rhode Islanders.

Legislative Initiatives

DCFHE staff participates on the Governor's Council on Mental Health, the Permanent Legislative Commission on Child Care, Governor's Commission on Disabilities and the RI Transition Council (for youth with disabilities transitioning to adulthood). DCFHE staff participated on shorter-term legislative initiatives, including Early Intervention, vision screening, childhood lead poisoning, tobacco control, injury prevention, and childhood obesity.

Coordination with Other HEALTH Programs

With respect to internal collaboration, the DCFHE works closely with other HEALTH programs on an ongoing basis. The Title V-funded programs in DCFHE work closely with other division and department programs on an ongoing basis This has enabled better collaboration around oral health, medical home, teenage pregnancy prevention, obesity prevention, tobacco control, injury and youth suicide prevention, STD prevention, and control and chronic disease and environmental issues. The DCFHE works closely with the Center for Health Data and Analysis (CHDA), including KIDSNET, to support maternal and child health data needs. An Interdepartmental Surveillance and Statistics Group facilitates data /information/best practices sharing within HEALTH.

The DCFHE has begun a Project Management Initiative (PMI) to fully integrate Department-wide operations, equity agenda and policy efforts across a number of high priority areas. The Initiative for a Healthy Weight is providing lead staff for a Childhood Obesity PMI, which will increase the impact and leverage resources to advance childhood obesity efforts. The Health Promotion & Wellness Team is working with the Chronic Care and Disease Management Team to bring individual and family wellness strategies to small businesses. The lead poisoning program collaborates with the asthma program and is assessing the feasibility of training lead center staff to incorporate asthma education and other healthy homes initiatives when visiting the homes of children with elevated blood lead levels. The Immunization Program collaborates with the Viral Hepatitis Program working to provide necessary vaccinations for at-risk adolescents and adults. The Office of Minority Health has organized training for DCFHE staff on culturally competency and the provision of linguistically accessible services. The Maternal and Child Health Block Grant is a PMI, to help create integration and synergy within HEALTH for maternal and child health efforts.

The DCFHE also participates as a member of the Department's Center for Public Health Communication, which sets policy and procedures for strategic and effective communication. The DCFHE’s Initiative for a Healthy Weight is working closely with KIDSNET staff and the Director’s office on a childhood height and weight electronic data collection project with surveillance and coordination of care applications.

KIDSNET made immunization information available to the Division of Infectious Disease and Epidemiology for disease outbreak investigations. The DCFHE also has ongoing partnerships with HEALTH's Division of Environmental and Health Service Regulation, which provides comprehensive site reviews of licensed health care facilities, including hospitals and community-based health centers. In addition, the DCFHE works closely with the Office of Vital Records to coordinate data collection at maternity hospitals and to integrate birth certificate data with KIDSNET and newborn screening systems. KIDSNET works with the Refugee Health Program to help track immunization and lead screening in refugee children.

The DCFHE participates on the state's Child Death Review Team, coordinated by HEALTH's Medical Examiner's Office. HEALTH's Division of Laboratories works with the Lead Program to analyze lead screening specimens and collect data. The Lead Program coordinates efforts with HEALTH's Refugee Health Program to ensure that refugees are screened for lead. In addition to regular coordination around programmatic data management, KIDSNET holds quarterly stakeholder meetings that include representatives from all HEALTH programs participating in KIDSNET.

Collaboration with Private Organizations & Associations

The Division's partnerships with private, community-based organizations and associations are extensive. The following represents a summary of several of its major relationships.

Private Provider Community: The Medical Director is active in professional provider organizations. DCFHE staff has worked closely with the RI Chapter of the American Academy of Pediatrics (RIAAP), the RI Chapter of Family Practitioners, and the RI Chapter of the American Academy of Obstetricians and Gynecologists on a number of DCFHE initiatives, including the Women's Health Screening & Referral Program (WHSRP), KIDSNET, RI LAUNCH, and Watch Me Grow RI. DCFHE works closely with the Physicians' Committee for Breastfeeding in RI. All primary care providers use KIDSNET. DCFHE staff provides technical assistance to Rhode Island CATCH projects funded by the AAP including an adolescent medical home project in Woonsocket and an effort to increase in prenatal care in the first trimester project in Washington County. RI maintains a universal vaccine policy and provides vaccine to all providers at no cost.

Community Health Centers: A significant proportion of DCFHE investments support activities in community health centers including, WIC, Family Planning, PPEP Parent Consultants, WHSRP, Tobacco Cessation Watch Me Grow, and two SBHCs. The DCFHE works directly with individual community health centers and the RI Health Center Association on larger policy issues impacting community health services delivery.

Hospitals: The DCFHE has strong partnerships with several hospitals in RI. DCFHE provides funding to the Children's Neurodevelopment Center (CNDC) at Hasbro Children's Hospital. Memorial Hospital is a Title X family planning site. The Newborn Screening Program works closely with Women & Infants' Hospital and other birthing hospitals in RI around training and quality assurance. The Newborn Screening Program also works closely with metabolic, cystic fibrosis, and hemoglobinopathy clinics at Rhode Island Hospital for diagnosis, treatment, and follow-up. Newport Hospital is collaborating with the DCFHE and other partners on the Newport County Healthy

Communities initiative. The DCFHE supports lead and immunization clinics for uninsured children at Rhode Island Hospital and St. Joseph Hospital. The Birth Defects Program has been working closely with Women & Infants', Kent County, and Hasbro Children's Hospital to improve case ascertainment. Representatives from these hospitals provide information, consultation, and guidance; several are members of the Birth Defects Advisory Council. The Immunization program provides all birthing hospitals in the state with a supply of Hepatitis B vaccine so that newborns receive the birth dose prior to discharge and the vaccination is reported to KIDSNET. PPEP Parent Consultants were placed at Hasbro Children's Hospital, Butler Hospital, Memorial Hospital, and Women & Infants' Hospital. The DCFHE works with Bradley Hospital (the state's psychiatric hospital for children and adolescents) on a mental health resource guide and developing mid-level mental health services for children graduating from intensive programs and to develop school capacity to address mental health concerns.

Insurers: DCFHE, with the largest Medicaid insurer in the state, evaluated the PPEP Parent Consultant Program. The utilization analysis that was presented to all RI health plans demonstrated that CSHCN who received PPEP services had lower health care costs as they had higher utilization of community based services and lower institutional level of care services. The DCFHE continues to work with the three Managed Care Medicaid organizations in RI to share data and increase support for public health efforts for the vulnerable Medicaid population.

Visiting Nurse Associations (VNAs): The DCFHE has strong partnerships with several VNAs through the First Connections Home Visitors providing home assessments, connection to community services, and help with child development and parenting for almost one-third of all families with newborns each year. First Connections collects housing related information during the initial home visit and the DFCHE will use this data to promote access and availability to healthy housing. In addition, one VNA is a Title X family planning site. Another VNA provides newborn developmental risk assessment statewide, newborn blood spot screening follow-up and hepatitis B follow-up through contracts with the DCFHE. VNAs also participate on the Birth Defects Advisory Council. The VNA provides case management services for pregnant women/new mothers who are infected with chronic hepatitis B and C and the infant to assure completion of vaccination and medical referral.

RI Chapter of the March of Dimes (MOD): The DCFHE collaborates with the MOD on several major initiatives. The first focuses on ensuring that women (especially low-income women) in RI have access to folic acid information and supplements prior to becoming pregnant or early in pregnancy in order to prevent birth defects. Another initiative is working to reduce prematurity in RI. A third initiative places family support in the state's only neonatal specialty care nursery, the NICU at Women & Infants Hospital and blends the expertise of a Parent Consultant and a MOD parent support professional to provide family support, education to families and staff, and referrals. DCFHE is working collaboratively with MOD to implement the expanded newborn screening panel to meet the recommendations of the American College of Medical Genetics. The DCFHE, in partnership with the MOD and Women and Infants Hospital, established a statewide Prematurity Task Force to identify and prioritize recommendations to reduce premature births in RI. In November 2007, the top ten Task Force recommendations were presented at the MOD Prematurity Summit. During FY07, the Task Force has continued to work on implementing the recommendations.

Brain Injury Association of RI: The Traumatic Brain & Spinal Cord Injury (TBSCI) Program maintains a registry of individuals with traumatic brain and spinal cord injuries for the purpose of helping children and adults with TBSCI access appropriate services, including SSI and rehabilitative services. The program sends individuals with TBSCI a follow-up letter informing them of the Brain Injury Association of RI as a potential resource. With the passage of Rules & Regulations Pertaining to Traumatic Brain and Spinal Cord Injuries in July 2007, the OSHCN has seen a 500% increase in the reporting and linkage of victims and valuable information.

Child Care Providers: The Child Care Support Network (CCSN) works closely with the child care provider community and families. CCSN is made up of a team of professionals who work with licensed center-based and home-based child care providers to improve the quality of care for all children in the following areas: health and safety, nutrition, curriculum development, early literacy, CSHCN, child development, family involvement, and mental/behavioral health.

Healthy Mothers/Healthy Babies Coalition: The DCFHE participates in this statewide coalition dedicated to improving birth outcomes.

The Early Childhood Oral Health Coalition (ECOH): In collaboration with families and communities, the ECOH Coalition seeks to improve the oral health status and reduce disease disparities among young children by promoting effective oral health habits, expanding oral health and disease prevention knowledge, and advocating for improved access to oral health services.

Rhode Island KIDS COUNT: This children's policy organization provides information on child wellbeing and stimulates state dialogue on children's issues. Each year, the agency publishes a factbook, which provides detailed community-by-community pictures of the condition of children in RI. The DCFHE provides a significant proportion of data utilized in the factbook.

Covering Kids Rhode Island: Funded by a Robert Wood Johnson grant, increases children's access to Medicaid by helping local communities develop and implement strategies to enroll potentially eligible children and their families into Medicaid (including RIte Care/RIte Share). The DCFHE works closely with Covering Kids on community systems development initiatives.

Childhood Lead Action Project: This non-profit agency is the only advocacy agency in RI solely dedicated to addressing the problem of childhood lead poisoning. The agency is a member of the Healthy Housing Collaborative.

Rhode Island Public Health Association (RIPHA) is the state affiliate of the American Public Health Association, DCFHE staff participate on the board and other efforts.

Rhode Island Public Health Institute (RIPHI): The RIPHI was formed to organize and activate private sector professionals interested in the advancement of public health in RI. DCFHE personnel participate on the board and other efforts.

Kids First is a non-profit organization that convenes the RI Healthy Schools Coalition and guides communities and their schools to improve the nutritional and physical well-being of children. DCFHE contracts with Kids First to work with school district health and wellness subcommittees. DCFHE staff participates on the steering committee and related workgroups.

Youth in Action (YIA): The DCFHE is partnering with the youth-led, community-based organization YIA to provide family planning outreach, education, and referral services to culturally diverse young men living in the Southside of Providence.

Rhode Island Breastfeeding Coalition (RIBC): RIBC is a coalition of community organizations and groups dedicated to supporting and promoting breastfeeding in RI. Members include lactation consultants from local birthing hospitals, physicians, and other health care professionals. The RIBC organizes statewide breastfeeding events such as "World Breastfeeding Month".

Rhode Island Food Dealers Association: This professional association acts as the liaison between the WIC Program and WIC vendors throughout the state.

Childhood Immunization Action Coalition: The coalition consists of DCFHE staff, community-based agencies, civic organizations, medical care providers, schools, Head Starts, hospitals, and health insurance plans. The purpose of the coalition is to share strategies and develop plans for improving utilization rates.

Rhode Island Certified School Nurse Teachers' Association: The DCFHE partners with this group to provide input and feedback for the annual school nurse teachers' conference. This conference is an educational opportunity for school nurses from all public and private schools.

Family Leadership & Support Programs: The DCFHE actively collaborates with a number of family leadership and parent support agencies and programs. The DCFHE works closely with leadership from the RI Family Voices and participates in the Family Voices Leadership team. The DCFHE also contracts with the RI Parent Information Network (RIPIN) to provide training and technical assistance to the Parent Consultant Program and the Parent support Network.

Higher Education: HEALTH and the DCFHE have active relationships with many of the state's colleges and universities. HEALTH is working to develop formal agreements with area institutions of higher education to facilitate HEALTH staff training and collaborative research and grant writing. In partnership with 3 Rhode Island Colleges, the Lead Program offers training to nursing students about environmental threats in the home. The DCFHE is also working with the RI Area Health Education Center (housed at Brown University) to develop and offer multidisciplinary training on early childhood mental health. Through the Joint Legislative Commission on the Educating Children with Autism Spectrum Disorders, the DCFHE is designing a teacher competency certification in ASD and incorporating these competencies into undergraduate special education curriculum. The DCFHE partners with Brown University faculty on a variety of special needs, especially Autism and other developmental disabilities.

Ocean State Adult Immunization Coalition – HEALTH entered into a formal contract with OSAIC to provide support and consultation in regards to adult immunization services.

RI Association of School Principals HEALTH is collaborating with the association on professional development and toolkit related to supporting mental health promotion among school age children.

Coordination with Other Federal Grant Programs

DCFHE programs receive funding from several federal grant programs. These programs include: Family Planning (Title X), WIC (USDA), Newborn Hearing Screening (CDC), RI LAUNCH (SAMSHA), PRAMS (CDC),

Immunization (CDC), Lead Program (CDC), Disability & Health (CDC), Tobacco Control Program (CDC), Initiative for Healthy Weight (CDC), SafeRI, Violence and Injury Prevention Program (CDC and SAMHSA), and Child Care Support Network (ACF). DCFHE programming is also supported through several HRSA grants including: Universal Newborn Hearing Screening, President's New Freedom Initiative Integrated Community Systems for CSHCN, State Early Childhood Comprehensive Systems, and Healthy Tomorrows Partnership for Children.

Advisory Committees

The DCFHE has established advisory committees and workgroups for many of its programs that include professional and consumer representation. Current DCFHE advisory and workgroups include the Childhood Immunization Action Coalition, Immunization Physician Advisory Committee, Successful Start Steering Committee and a newly formed adolescent transition team concerning systems development for children 9 years and older, WIC Vendor Advisory Council, Oral Health Advisory Council, Healthy Housing Collaborative, and newborn screening advisory committees. Newly developed committees supported by the DCFHE include the RI Prematurity Task Force, Healthy Homes Collaborative, Autism Spectrum Disorder Advisory Board, Injury Community Planning Group, Sexual Violence Prevention Planning Committee, the Tobacco Control Coalition, and the Eat Smart Move More-Health Promotion Policy Council.

3. Strengths and Needs of the Maternal and Child Health Population Groups and Desired Outcomes

Overview of the Maternal and Child Health Population Status

The following overview is organized by maternal and child health (MCH) population groups, i.e., pregnant women and mothers, infants, children, adolescents, children with special health care needs, and lastly, women across the life course. Topics are organized by the priorities identified by the state following the needs assessment process. A brief discussion of the changes in these populations between 2000 and 2008 precedes the overview of the health status of the MCH populations in Rhode Island.

Population Changes in Rhode Island: 2000-2008

Between 2000 and 2008, Rhode Island's population rose 0.24%, from 1,048,319 to 1,050,788. The largest increase (13.7%) occurred among those aged 45-54, where that population rose from 141,863 in 2000 to 161,336 in 2008. However, not all age groups experienced increases; decreases were seen among children aged less than 5 (-5.2%), those aged 5-9 (-18.1%), and those aged 10-14 (-8.2%) (Figures 2 and 3).

The number of children in Rhode Island aged less than 18 decreased by 7.8%, from 247,822 in 2000 to 228,540 in 2008. There were differences within specific age categories in the amount of decrease, where the largest decrease was among children aged 5-9. In 2000 there were 71,905 children aged 5-9 and by 2008 the number fell to 58,882, representing an 18.1% decrease. There was only a slight increase, 3.7%, in the number of teens aged 15-19 during this period.

Overall, the number of women of childbearing age (15-44) decreased by 6.2%, from 232,223 in 2000 to 217,921 in 2008. Specifically, the number of women aged 30-34 and 35-39 decreased, by 18.8% and 17.6% respectively. However, women aged 15-29 increased by 4.4% in 2008.

Over the past eight years, Rhode Island experienced significant changes in its racial/ethnic populations. Specifically, the number of those of Hispanic or Latino ethnicity increased from 90,820 (4.6%) in 2000 to 122,206 (8.7%) in 2008, a 34.6% increase. Increases were also seen among Black or African Americans (from 4.5% to 5.4%) and Asians (from 2.3% to 2.9%). The American Indian and Alaska Native population remained consistent representing 0.5% of the state's population. In 2000 Whites represented 85.0% of the state's population and by 2008, this proportion dropped to 83.2%.

Figure 2

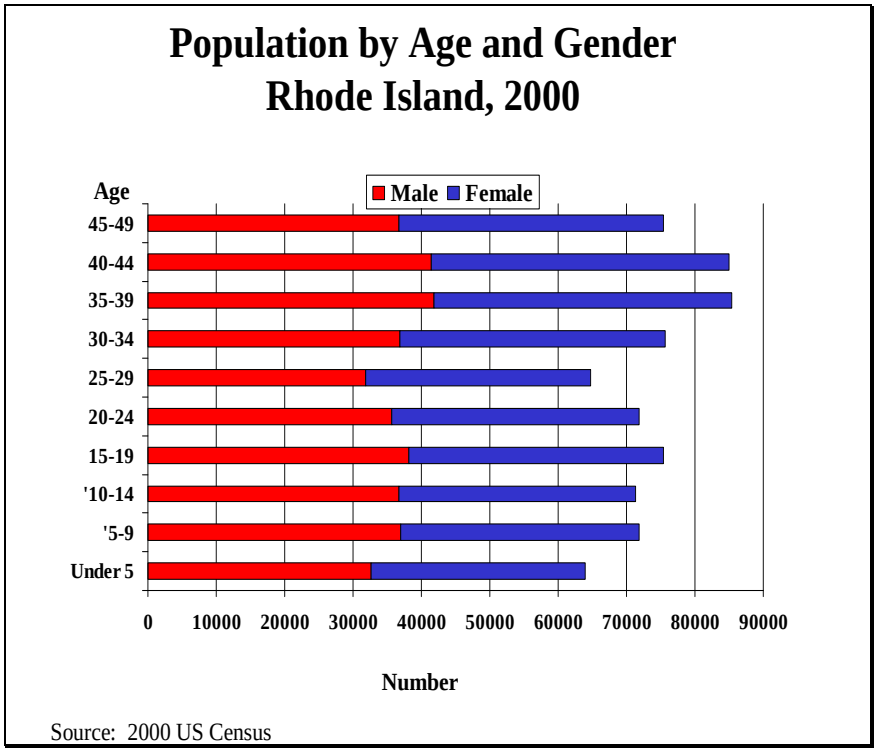
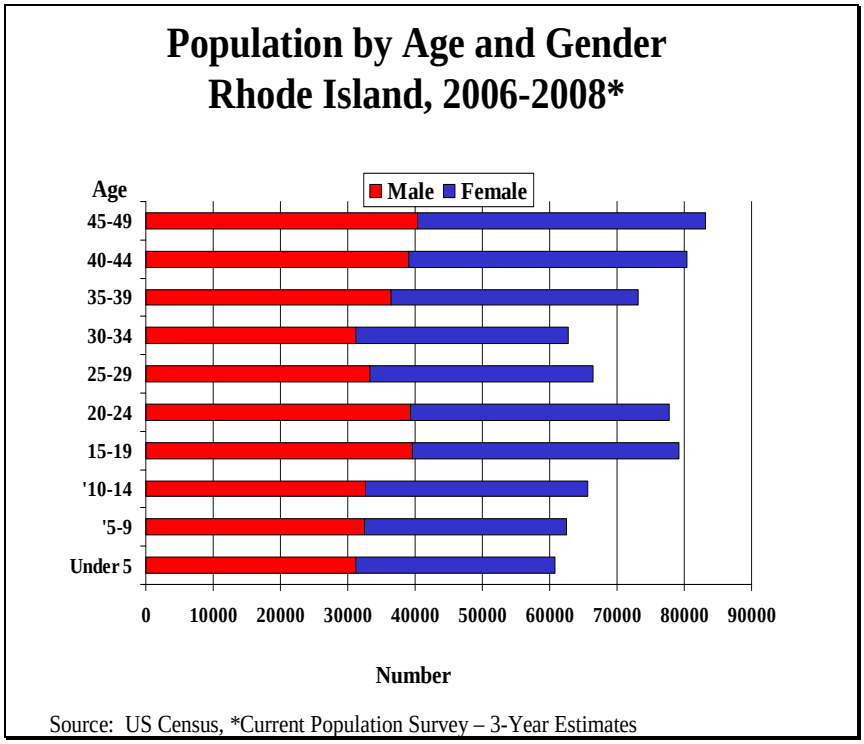


Figure 3



3A. PREGNANT WOMEN AND MOTHERS

Over the past several decades, the age at which women have children has risen dramatically. Increasingly, women are postponing childbearing until their 30s and 40s. This age group has seen increased rates of births since the 1970's with rates in 2003 at the highest since the advent of modern contraception. In 2003, nearly forty percent of births were to women 30 years and older.[10] This demographic shift in age at childbearing presents certain challenges to various maternal health goals and may increase risk for maternal and neonatal morbidity and mortality. First, the chance of developing most chronic diseases increases with age. Second, the longer a woman has had a chronic illness, the more likely it is that her health is negatively affected. As a woman's body "weathers", or ages the effects of any such illness she may enter pregnancy in poorer health compared to her younger counterparts. According to a life course perspective, prolonged exposure to adverse or deleterious health conditions may be cumulative, resulting in potential challenges and complications to an otherwise successful pregnancy outcome. And lastly, rates of maternal mortality and morbidity increase with age.[11] From a life course perspective, recognizing maternal and child health through connected stages is important to understanding a woman's life as an integrated whole.

Access to health care can modify various factors that impact pregnancy for women of childbearing age. Health care, including access to family planning services, may be considered as the broad range of activities from primary prevention, including preventing young adolescents from having unplanned pregnancy, as well as medical interventions that includes screening for specific diseases.[12]

Family Planning/Birth Control

The Family Planning Program provides affordable, confidential family planning and related preventive health services in accordance with nationally recognized standards. Evidence indicate that these services should lead to improvement in the overall health of individuals, with a priority for services to low-income individuals. The program offers access to a broad range of acceptable and effective family planning methods and related preventive health services that include contraceptive methods, natural family planning, Level I infertility services, preconception counseling, pregnancy testing, breast and cervical cancer screening, HIV/STD prevention education, HIV counseling, testing, and referral service, and services for adolescents (including abstinence counseling). The broad range of services provided does not include abortion as a method of family planning.

Between 2004 - 2008, the number of clients seen at Rhode Island's Title X-funded family planning clinics decreased by 14.0%, from 21,892 to 18,821. Between 2008-2009, there was a 21.5% increase in the number of individuals receiving Title X-funded family planning services (18,821 and 22,875, respectively). Overall, this represents a 4.5% decrease from 2004, when 21,892 individuals were served.

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[10] Chang J, Elam-Evans L, Berg C, et al. Pregnancy-related mortality surveillance -- United States, 1991-1999.*MMWR.* 2003;52 (SS-2):1-8.
[11] Grason H and Misra D. 2006. Application of a Lifecourse and Multiple Determinants Framework to Improve Maternal Health. Baltimore, MD. Women's and Children's Health Policy Center. Johns Hopkins Bloomberg School of Public Health.
[12] Ibid.

In CY2009, the Title X Family Planning Program received supplemental funding to increase client utilization in funded agencies. During 2009, the Family Planning Program served 22,875 individuals, 87% of whom were female. Nineteen percent were members of a racial minority group and 38% reported being Latino. Eighty-eight percent had incomes at or below 200% of the federal poverty level and 43% were uninsured.

Title X-funded family planning agencies offer individuals a wide range of contraceptive choices. In 2009, the preferred contraceptive methods among Title X clients were: oral contraceptives (27%), male condoms (17%), abstinence (12%), injection (10%), IUD (10%), other methods (8%), hormonal patch (3%), ring (2%), fertility awareness (1%), vasectomy (1%), hormonal implant (1%) and sponge, Diaphragm, cervical cap, female condom, or spermicide (<1%). The contraceptive method of choice was not reported for 1% of the clients, and 6% of the clients were using no method. Since 2006, the estimated number of unintended pregnancies averted in Rhode Island as a result of Title X family planning services is 2,600 each year.

Rhode Island's Title X family planning agencies are increasingly impacted by the rising cost of contraceptives and rising prices for screening and diagnostic testing technologies. The per client cost of purchasing contraceptive supplies in the nation increased by 58% in 2001 over 1995. This increase was primarily due to the increasing cost of oral contraceptives and the higher relative cost of the newer contraceptive methods, such as the IUS, Implant, and the contraceptive patch. In addition, Title X providers have seen an increase in the cost of purchasing Pap tests. The newer liquid-based Pap test is rapidly becoming the standard of care in American gynecology despite the fact that, according to Title X providers, it is triple the cost of conventional tests.

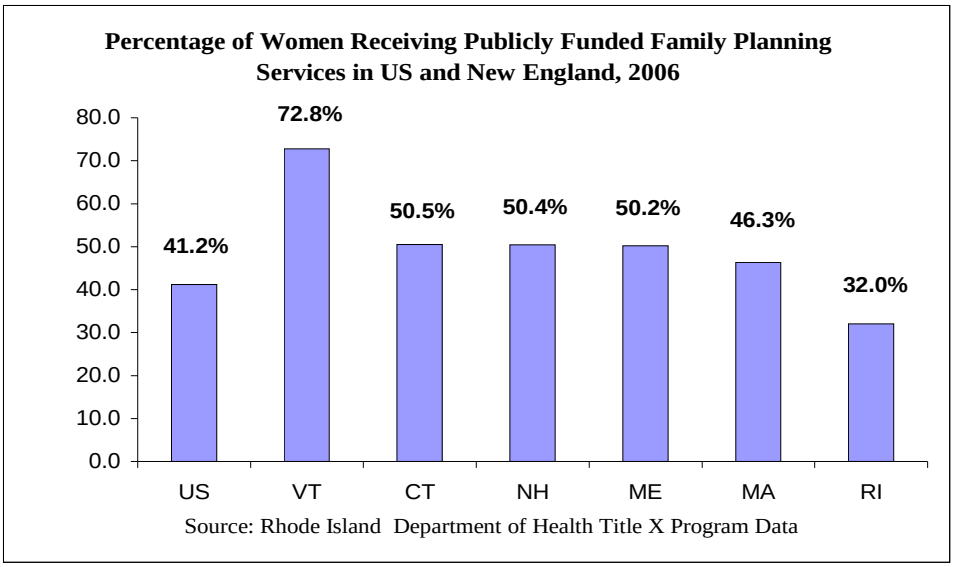
According to the Guttmacher Institute, Rhode Island now ranks last among the six New England states and lower than the nation in the provision of Title X family planning services to women in need of publicly funded family planning services. According to Title X family planning program data, during the period 2004-2008, 38% of women who gave birth in Rhode Island reported that their pregnancies were unplanned, meaning that their pregnancies were wanted later or not at all. Ten percent of these women reported that they had difficulty accessing contraceptives prior to becoming pregnant. The number of women in need of publicly funded contraception increased by 10% between 2000 and 2004, which was higher than the nation as a whole (6.1%) and the highest of the six New England states.

In 2006, Rhode Island served only 32% of the women in need for contraceptive services through sites that offer contraceptive services to the public and use public funds, including Medicaid. Rhode Island ranks lower than the nation as a whole (41.2%) for serving women in need and is the ninth worst of the 50 states (the best state is Alaska at 97.3%, and the worst state is Hawaii at 22.1%). Rhode Island is lower than New England as a whole (50.3%), with the best state being Vermont (72.8%) and Massachusetts being the next lowest state (46.3%) after Rhode Island (Figure 4).

In 2006, Rhode Island spent $58 per woman in need of publicly funded contraceptive services. This includes all sources of public funding (Title X Family Planning Grant, Medicaid, Title V Maternal & Child Health Block Grant, Temporary Aid to Needy Families, and Social Services Block Grant). Rhode Island ranked lower than the nation as a whole ($106) and was the 16th worse state in the nation. The best state was Oregon ($279), and the worst state is Hawaii ($20). Rhode Island was lower than New England as a whole ($82) and the second worst state

in New England. The worst state is New Hampshire ($43), and Connecticut is the best state ($107). In 2005, the estimated annual cost of family planning services per women in need in Rhode Island was $159.

Figure 4



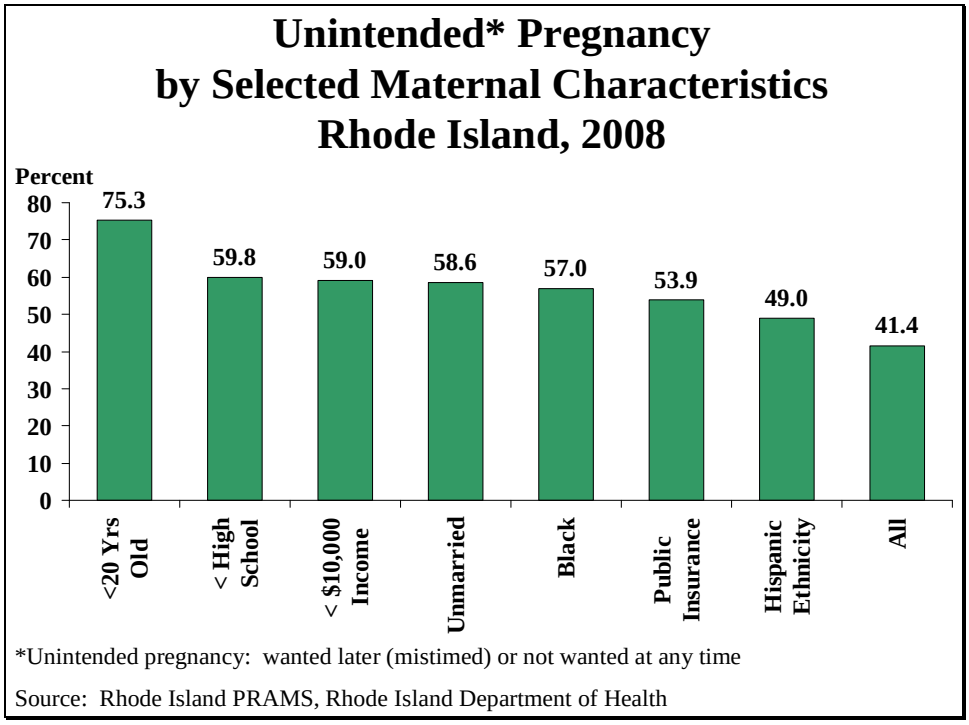
In 2007, the number of births financed by Medicaid in Rhode Island was 5,657, or 47% of resident births. Only a decade earlier, in 1997, Medicaid births accounted for 30% of resident births. In 2006, Rhode Island had the fifth highest abortion rate in the nation, with 22 reported abortions per 1,000 women aged 15-44 years. Only Nevada (23), Delaware (27), Florida (27) and New York (31) had higher rates. The rate for the nation as a whole was 16 and Rhode Island ranked higher than the other New England states. The rates in the other two urban New England states, Connecticut and Massachusetts, was 20 and 18, respectively.

In addition to providing clients with a broad choice of contraceptive methods, the Title X Family Planning Program provides: sexually transmitted disease (STD) testing and treatment; HIV counseling, testing, and referral (CTR) services; cervical and breast cancer screening and follow-up services; and the information, education, and counseling clients need to avoid unintended pregnancies and disease. In 2009, Title X-funded family planning agencies provided 7,599 pap tests, 7,858 clinical breast exams, 4,771 pregnancy tests, and 5,014 HIV tests to family planning clients.

Family Planning Data from the Rhode Island Pregnancy Risk Assessment Monitoring System (PRAMS)

Data from the Rhode Island Pregnancy Risk Assessment Monitoring System (PRAMS) indicate for the period 2007-2008 indicate that the percentage of women whose pregnancies were unintended (pregnancy was wanted later or not wanted at any time) increased from 37.8% to 41.4%. Figure 5 reflects the 2008 PRAMS weighted data, which illustrate higher unintended pregnancy rates among teens aged less than 20 (75.3%), unmarried women (58.6%), women with annual household incomes of less than $10,000 (59.0%), those with public insurance (53.9%), those with less than a high school education (59.8%), Black/African Americans (57.0%), and those of Hispanic/Latino ethnicity (49.0%).

Figure 5



Identification of Risks among Women Receiving Pregnancy Tests

In 1997, the Rhode Island Women's Health Screening and Referral Program (WHSRP) was developed to address four important health objectives: 1) to prevent unintended pregnancies; 2) to improve pregnancy outcomes by identifying risks and appropriate follow-up; 3) to identify gaps in the existing services delivery system; and 4) to create a risk responsive continuum of care for all women, regardless of pregnancy status.

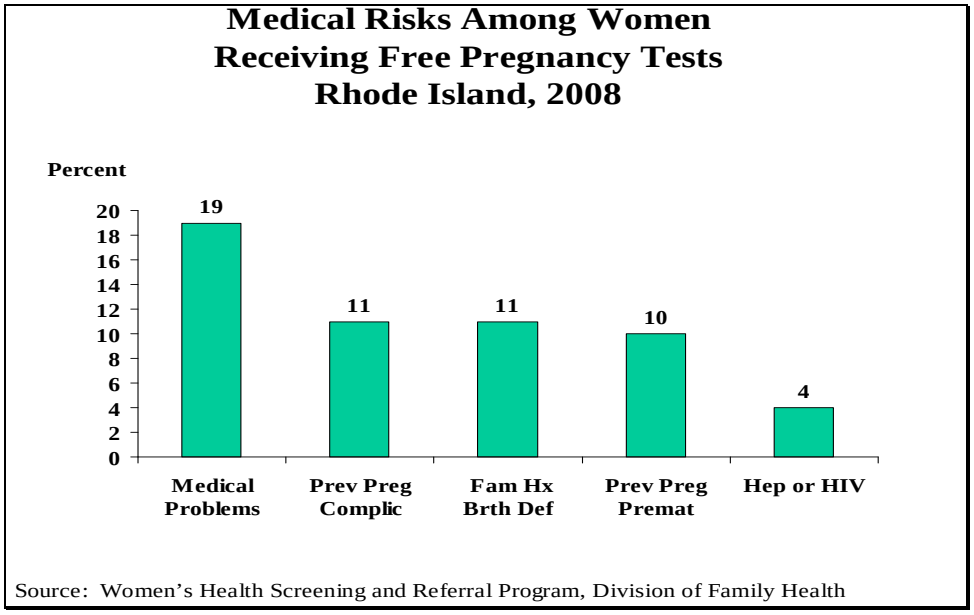
The WHSRP provides no cost pregnancy testing, comprehensive health risk assessment and referral services to approximately 3,000 women annually in nine Title X family planning sites. The clinics are located in high need communities, where there are large concentrations of poverty and other public health concerns. All women receiving pregnancy tests are asked to fill out a voluntary 21-item "Care Questionnaire" survey while they are waiting for the results of their pregnancy test. The questionnaire includes 5 risks that can be considered "medical"; 7 "behavioral", and 5 "socio-economic". The survey is available in English and Spanish.

The survey is designed to flag significant risks to a woman's health and pregnancy status. Women who are identified with one or more health risks through the WHSRP are provided with education and may be referred to one or more of the following services depending on the risk identified and the woman's pregnancy status: family planning, smoking cessation, home visiting, substance abuse assessment, domestic violence assistance, HIV/STD screening, mental health services, heating assistance, genetics counseling, nutrition services, medical specialty care, or early prenatal care.

During 2008, 3,501 women received a free pregnancy test through the Women's Health Screening and Referral Program. Figure 6 shows that in the "medical" risk category for the 2008 survey, 19% of respondents had medical or health problems; 11% experienced complications with a previous pregnancy; 11% reported birth defects,

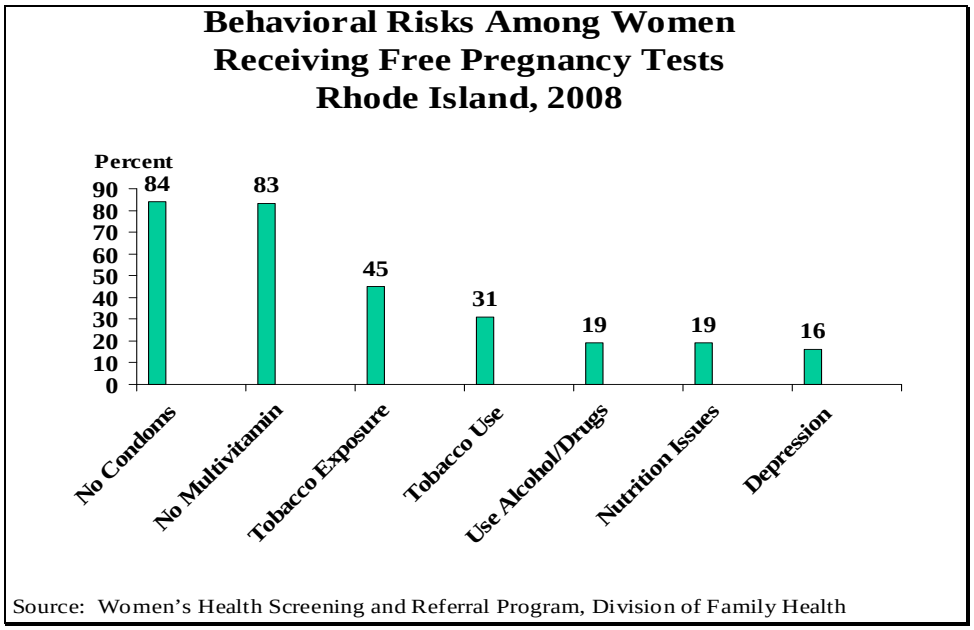
mental retardation, or developmental delay in their family or in their partner's family; 10% reported they previously delivered a premature or sick baby, or had a baby who died; and 4% reported either they or their partner has Hepatitis and/or HIV. The percentage of women who reported having or a partner having hepatitis, HIV, or AIDS decreased from 10% in 2003 to 4% in 2008.

Figure 6



In the "behavioral" risk category, during 2008, 84% partner did not use condoms; 83% reported they did not take a multivitamin every day; 45% of non-smokers spend time with smokers; 31% smoked tobacco; 19% used alcohol or drugs; 19% had concerns about their nutrition or diet; and 16% reported they were depressed or had other mental health problems (Figure7).

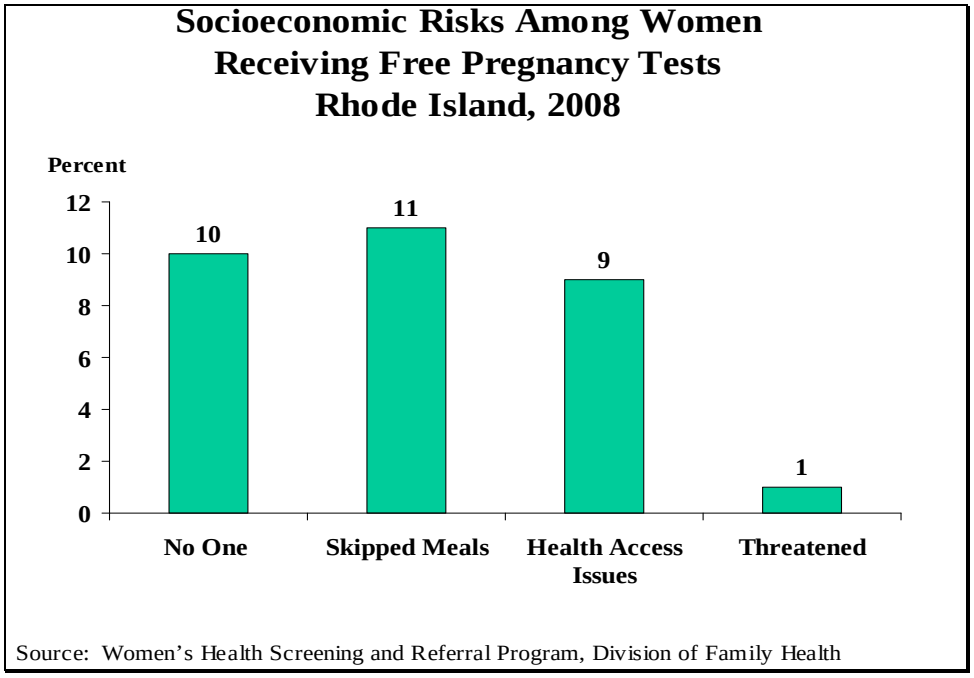
Figure 7



In the "socioeconomic" risk category (Figure 8), data from the Women's Health Screening and Referral Program in 2008 indicate, amongst survey respondents, 10% had no one at home to rely on if they were pregnant; 9% had difficulty accessing health care services due to transportation and/or child care issues; 11% said they often skipped meals due to a shortage of money for food; and 1% reported they sometimes felt physically or verbally threatened at home.

These are similar to those reported in 2006. However, there was a decrease in the percentage of respondents who indicated they had no one at home to rely on if they were pregnant, from 12 % in 2006 to 10% in 2008.

Figure 8

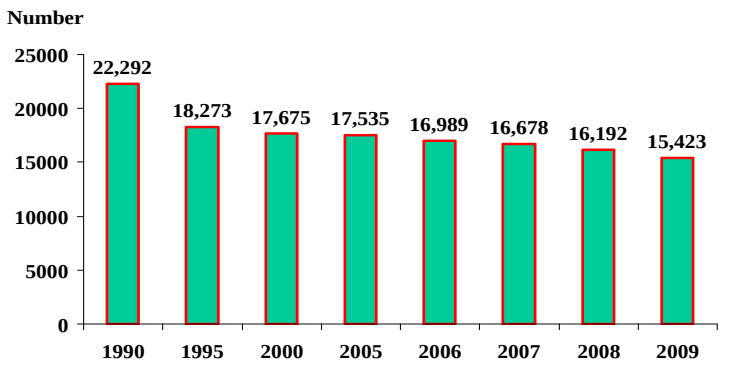


Almost all of the Care Questionnaire respondents reported having more than one risk where, 9.8% reported 1-3 risks; and 3,154 (90.1%) reported 4 or more risks.

Pregnancies/Births/Fertility Rates

During the 1990's, Rhode Island experienced a decrease in the number of pregnancies (live births, induced abortions, and spontaneous abortions) among its residents (Figure 9). Between 1990 and 1999, the total number of pregnancies among women of all ages decreased by 22.9%, from 22,922 to 17,187. Provisional 2009 data indicate the declining trend in the number of pregnancies among Rhode Island residents has continued. Between 2008 and 2009 the number of pregnancies decreased by 4.7%, from 16,192 in 2008 to 15,423 in 2009. Decreases were seen in the number of births, induced terminations, and spontaneous fetal deaths.

Figure 9



Note: 2009 data are provisional. Pregnancies include births, induced terminations and spontaneous (miscarriages, etc.) fetal deaths

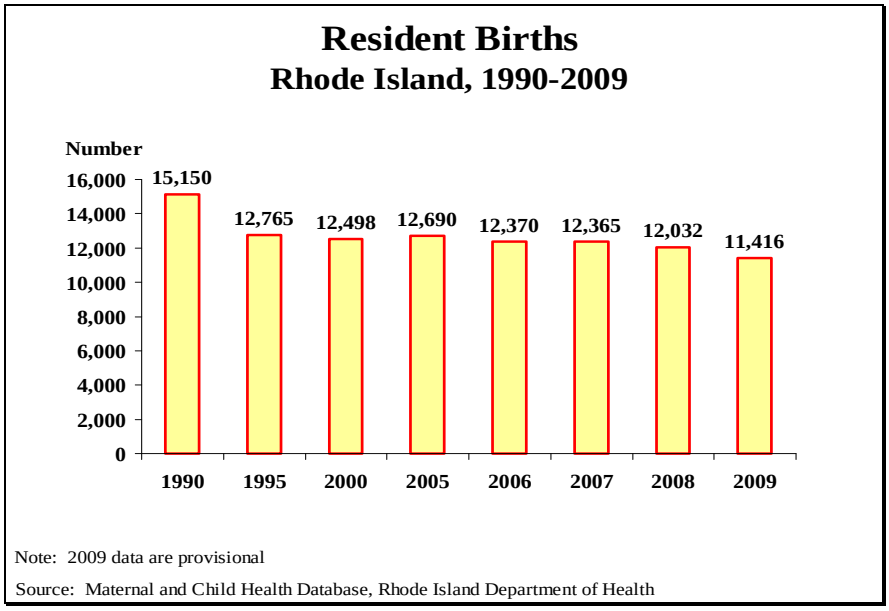
Source: Maternal and Child Health Database, Rhode Island Department of Health

During 2009, there were a total of 15,423 pregnancies among women of childbearing age (15-44 years), of which there were 11,416 (74.0%) live births, 3,281 (21.3%) induced abortions, and 726 (4.7%) spontaneous abortions. Between 2008 and 2009, the pregnancy rate decreased by 3.5%, from 74.3% to 70.8%.

The pregnancy rate among women of childbearing age has decreased from 92.8 per 1,000 women in 1990 to 70.8 in 2009, a 23.7% decrease. Nationally, the pregnancy rate among U.S. women of childbearing age was 103.0 – the rate varied little between 1995-2004. In 2004, there were an estimated 6,390,000 pregnancies, which resulted in 4.11 million live births, 1.22 million induced abortions, and 1.06 million fetal losses in the United States. During 1990-2004, live births decreased among Rhode Island women of childbearing age by 17.4%.

The total number of births among Rhode Island residents declined during the 1990 decade, but by 2000 this trend changed and births began to rise. Figure 10 shows there were a total of 15,150 births among Rhode Island residents in 1990, and by 1999 the number of births had dropped to 12,364, representing an 18.6% decrease. However, between 1999 and 2009, the number of births decreased by 7.7% from 12,364 to 11,416.

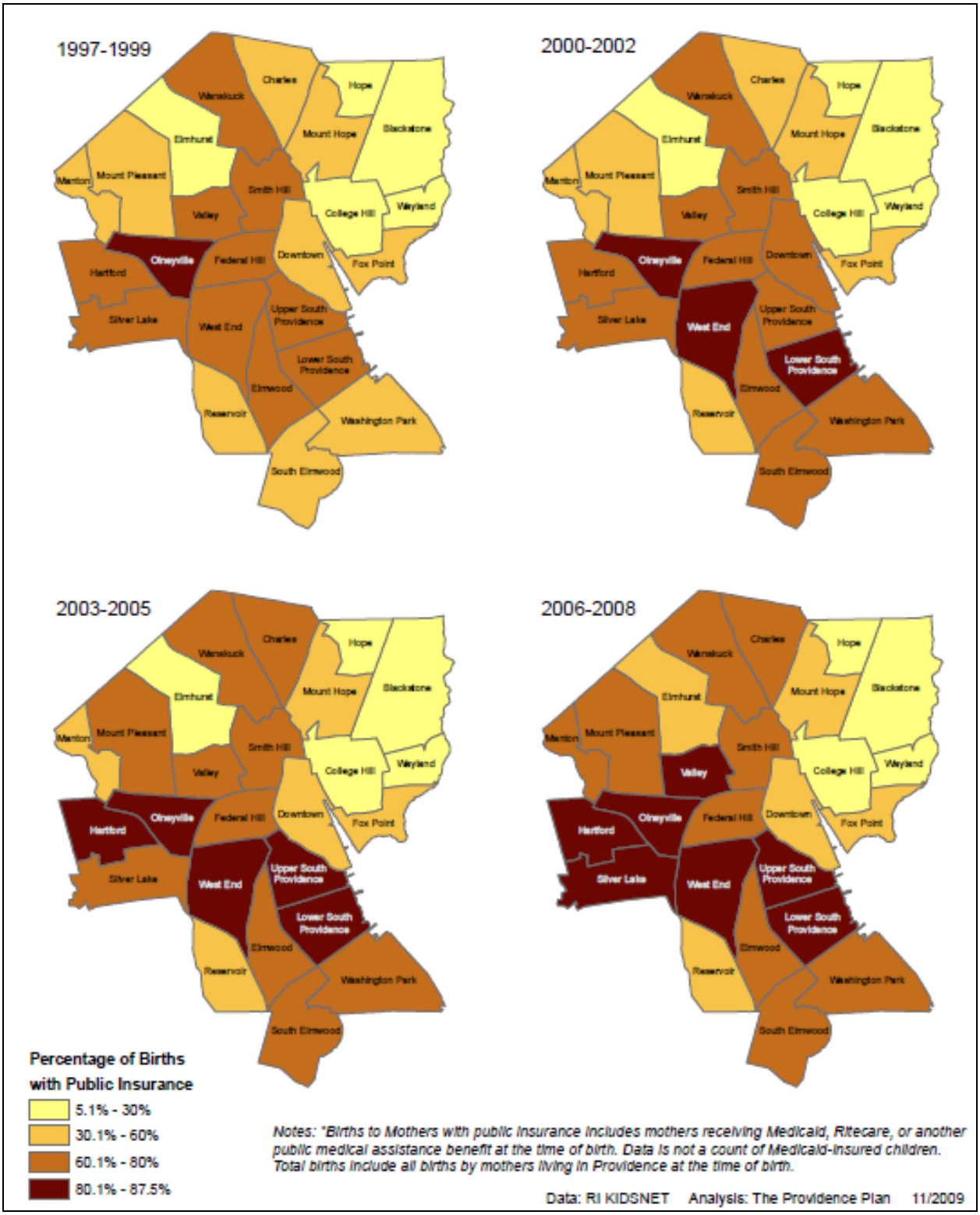
Figure 10



Births Financed by Medicaid

According to the Department of Human Services Medicaid Research and Evaluation Project, in 2007, the number of births financed by Medicaid in Rhode Island was 5,657, or 47% of all births. Only a decade earlier, in 1997, Medicaid births accounted for 30% of the 12,076 resident births, or 3,619 births. Figure 11 shows births to mothers with public insurance as a percentage of total births, by all the neighborhoods in Providence, which is the largest city in Rhode Island.

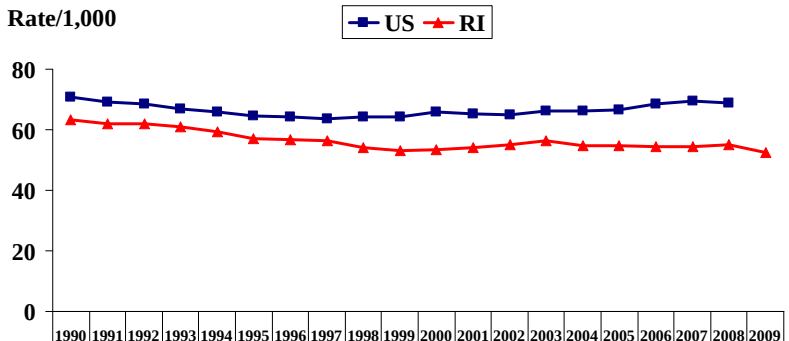
Figure 11
Births to Mothers with Public Insurance as a Percentage of Total Births, by PROVIDENCE Neighborhoods



Although the number of women of childbearing age in Rhode Island had been rising during previous decades, the population has decreased since 1990. Between 1960 and 1990, the number of Rhode Island women aged 15-44 rose 41.2%, from 169,222 to 238,886. However, between 1990 and 2008, the population of women of childbearing age in Rhode Island decreased by 8.8%, from 238,886 to 217,921, respectively (Source: 2008 estimates from Current Population Survey, U.S. Census). During 1990-2009, the fertility rate decreased 11.0%, from 63.4 to 52.4 (Figure 12).

Figure 12

Fertility Rates Among Women Aged 15-44
Rhode Island and United States, 1990-2009



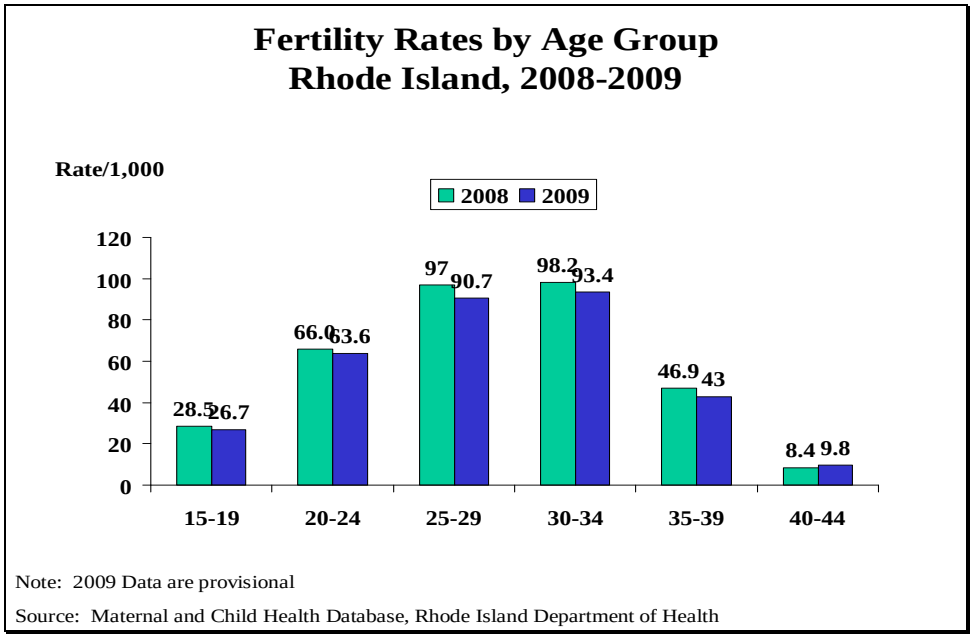
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
US	70.9	69.3	68.4	67.0	65.9	64.6	64.1	63.6	64.3	64.4	65.9	65.3	64.8	66.1	66.3	66.7	68.5	69.5	68.7	NA
RI	63.4	62.0	62.1	60.9	59.4	57.1	56.7	56.4	54.0	53.1	53.6	54.2	55.0	56.3	54.9	54.9	54.5	54.4	55.2	52.4

Note: 2009 RI and 2008 US data provisional; rates calculated using US Census population data

Source: Maternal and Child Health Database, Rhode Island Department of Health

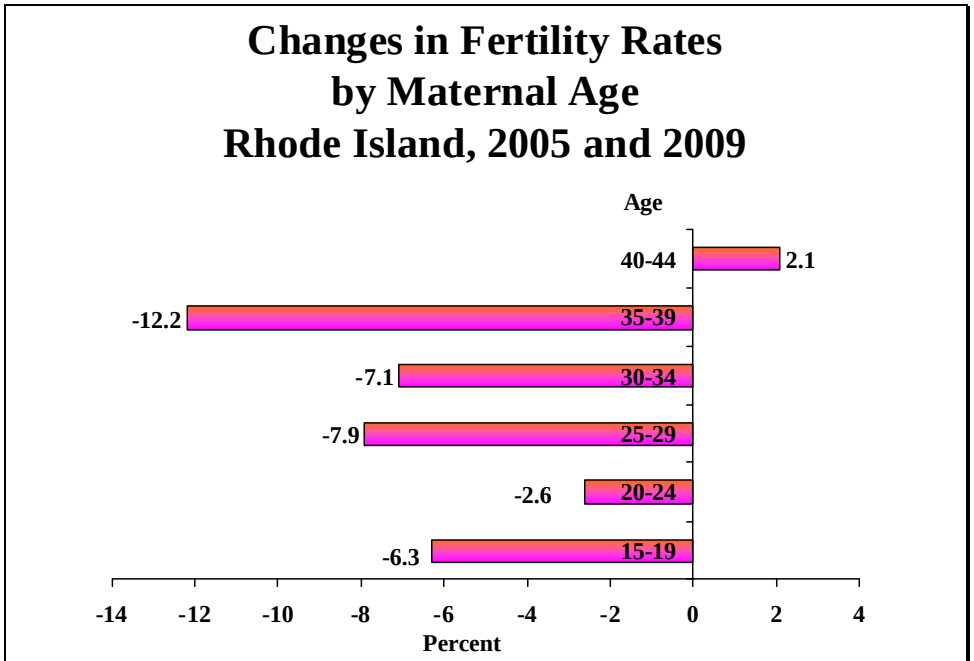
Figure 13 shows the differences in fertility rates by age between 2008-2009. During 2009, women aged 30-34 had the highest fertility rate (93.4) followed by women aged 25-29 (90.7). Women aged 40-44 had the lowest fertility rate (9.8). This rate has been increasing with the rising number of births among this age group as more women delay childbirth. Fewer teens are giving birth, and this is reflected in this group's fertility rate of 26.7. Overall, the fertility rate among those aged 15-44 decreased by 5.1% (from 55.2 to 52.4). However, greater changes were seen among teens aged 15-19 (6.3% decrease), women aged 25-29 (6.5% decrease), and women aged 35-39 (8.3% decrease). The only group to see an increase during 2008-2009 was among women aged 40-44 (1.7%).

Figure 13



Over the past years, fertility rates among women of childbearing age have been changing and these changes differ by maternal age and race/ethnicity. Figure 14 shows that between 2005 and 2009, the fertility rate increased among the oldest age group (40-44) and decreased among those aged 15-39. The only group to see an increase was in the group of women aged 40-44, although it was nominal (2.1%). Since 1990, births have been decreasing among teens aged 15-19. The age-specific fertility rate for teens aged 15-19 decreased 40.1%, from 44.6 in 1990 to 26.7 in 2009. Among women aged 25-29, the fertility rate decreased 23.0%, from 117.8 in 1990 to 90.7 in 2009. Although the number of births among women aged 45 and older is very small in Rhode Island, it has been gradually rising, from 5 births in 1990 to 25 in 2009; the birth rate among these women rose 400%.

Figure 14



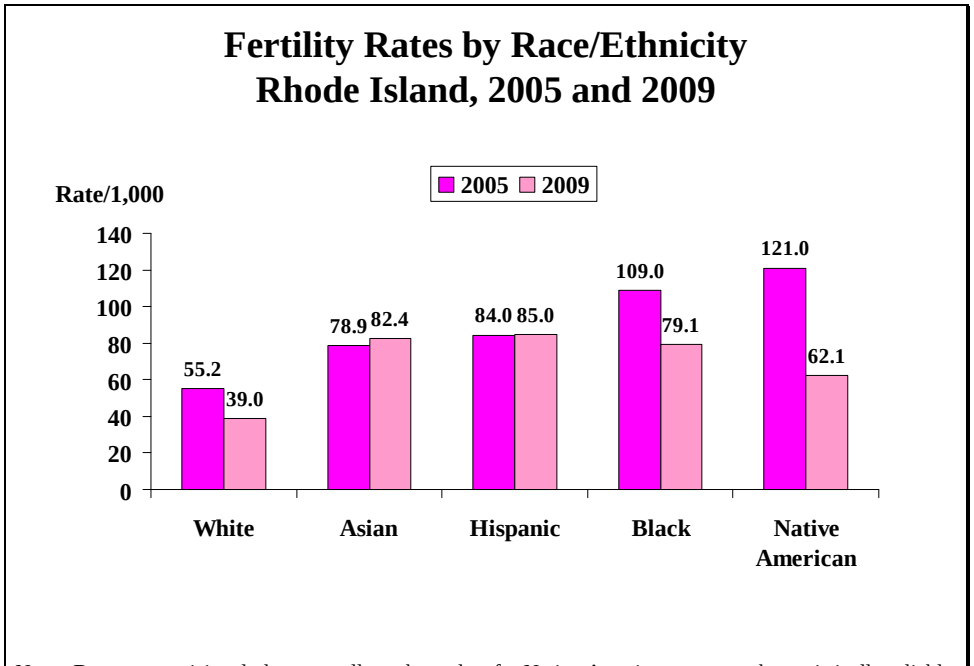
Note: 2009 data are provisional; rates are based on 2008 US Population Estimates
Source: Maternal and Child Health Database, Rhode Island Department of Health

Racial Disparities

Fertility rates vary by race/ethnicity, and 2005 data indicate that Whites had the lowest rate (55.2) (Figure 15). Although Native Americans had the highest rate (121.0), it should be noted that the total number of Native American females aged 15-44 in Rhode Island is small (n=1,223), according to the 2000 U.S. Census and have an average of 150 births annually.

According to provisional 2009 birth data, Whites continue to have the lowest fertility rate (39.0), while those with Hispanic/Latino ethnicity have the highest rate (85.0) in comparison to other racial/ethnic groups. As noted above, the total number of Native American females aged 15-44 is small (n=1,223), which resulted in the dramatic change during the five year period. Fertility rates for other racial/ethnic groups are as follows: Asian (82.4), Black/African Americans (79.1), and Native Americans (62.1).

Figure 15

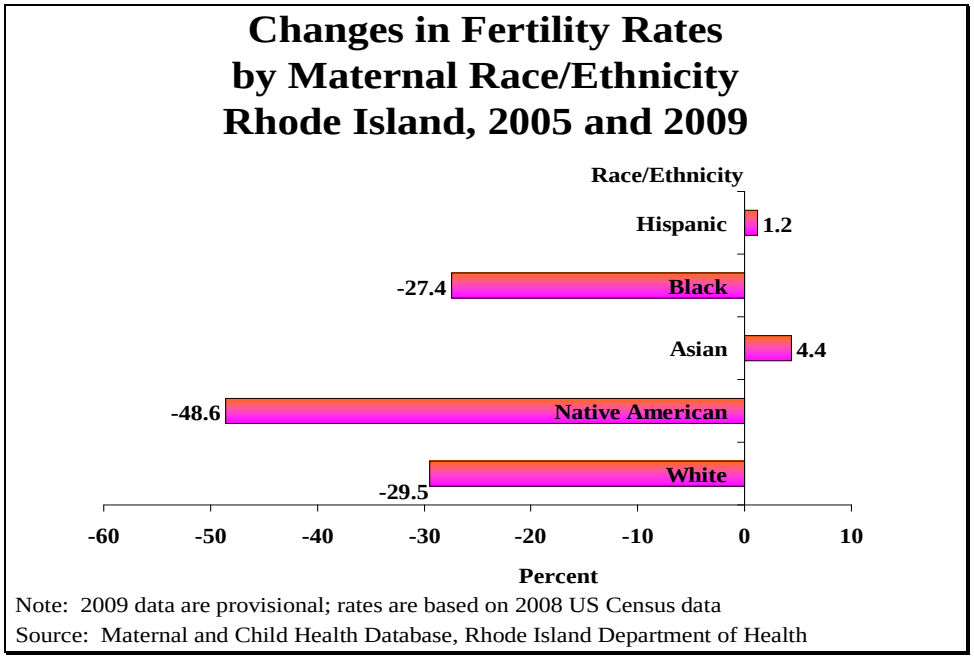


Note: Data are provisional; due to small numbers, data for Native Americans may not be statistically reliable

Source: Maternal and Child Health Database, Rhode Island Department of Health

Changes in fertility rates varied by racial/ethnic group between 2005 and 2009. Three groups experienced over a 25% change in their respective rates. Figure 16 shows the degree of change by race/ethnicity. Those of Native American race had the highest rate of change (48.6% decrease) due to their small population and the statistical instability of the rate, followed by Whites (29.5% decrease), Blacks (27.4% decrease), Asians (4.4% increase) and Hispanics (1.2% increase).

Figure 16

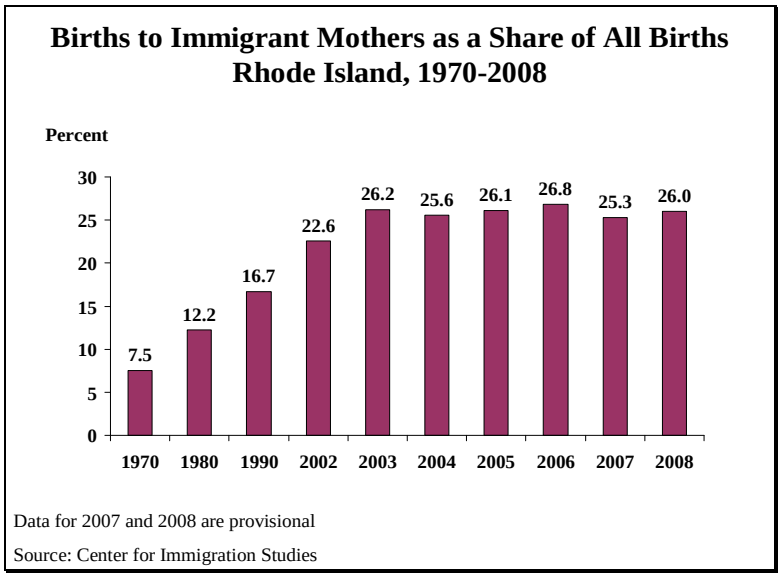


Note: 2009 data are provisional; rates are based on 2008 US Census data
Source: Maternal and Child Health Database, Rhode Island Department of Health

Births to Immigrant Mothers

The percentage of births to immigrant mothers has been rising steadily over the past decades. During 2008, over one-fourth, 3,128 (26.0%), of the 12,032 births among Rhode Island women were to immigrant mothers. This figure represents an almost three-fold increase since 1970, when 7.5% of Rhode Island births were to immigrant mothers (Figure 17).

Figure 17



Data for 2007 and 2008 are provisional
Source: Center for Immigration Studies

Prenatal Care

Early prenatal care is important to identify and treat health problems and to influence health behaviors that can compromise fetal development, infant health, and maternal health. Women receiving late or no prenatal care are at increased risk of poor birth outcomes such as having babies who are stillborn, of low birthweight, or who die within the first year of life.

Prenatal care offers the opportunity to screen for and treat conditions that increase the risk for poor birth outcomes and to educate parents on caring for newborns. Effective prenatal care also screens for and intervenes with a range of maternal needs including nutritional needs, social support, mental health, smoking cessation, substance use, domestic violence, and unmet needs for food and shelter. Prenatal visits are also the first step in establishing the infant's medical home and can provide valuable links to other health services.

Rhode Island continues to have high rates of early entry into prenatal care. In 1990, 86.7% of pregnant women received prenatal care in the first trimester, and by 1999, the figure had increased to 91.1%, surpassing the Healthy People 2010 objective of 90%. (These figures are derived from self-reported data on the birth certificate.)

As of 2006, these data reflect a change in the data collection methodology with the streamlining of the electronic birth certificate and the Newborn Developmental Risk Screening (NDRS) Program data. The NDRS data override the birth certificate worksheet because they are collected from medical records provided by obstetricians (forms they complete and send to hospitals prior to delivery) rather than from the birth certificate worksheet, which relies on self-reported data from the mother and are considered less reliable.

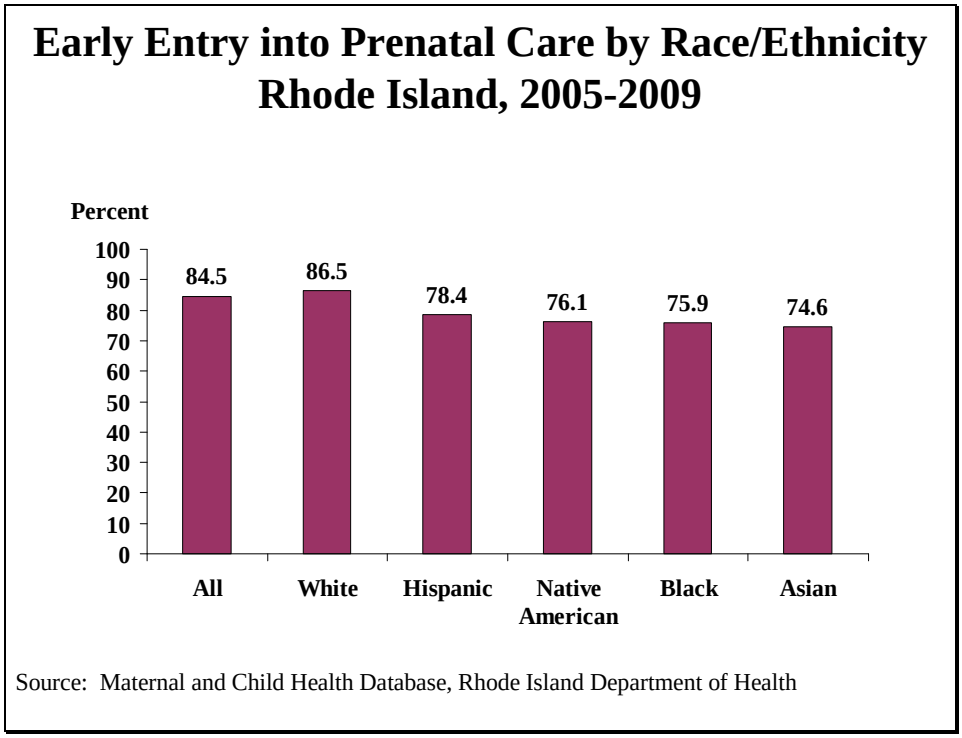
The proportion of Rhode Island women who received prenatal care in the first trimester increased slightly from 84.5% in 2006 to 85.2% in 2009.

Racial Disparities

The rate of early entry into prenatal care varies among different population groups. Figure 18 shows that although 84.5% of pregnant women received prenatal care in the first trimester during 2005-2009, the rate was lower among certain racial/ethnic groups. For example, only 74.6% of Asians received prenatal care in the first trimester compared to 86.5% of Whites. Blacks (75.9%), Native Americans (76.1%) and those of Hispanic/Latino ethnicity (78.4%) also had rates that were lower than those for Whites.

Racial/ethnic disparities continue to persist in the rates of first trimester prenatal care among Rhode Island residents. Provisional 2009 data indicate that Whites had the highest rate (87.9%) and Native Americans had the lowest rate (74.7%). Blacks/African Americans (Asians (80.0%) and those of Hispanic/Latino ethnicity (81.4%) had lower rates of first trimester prenatal care than Whites.

Figure 18

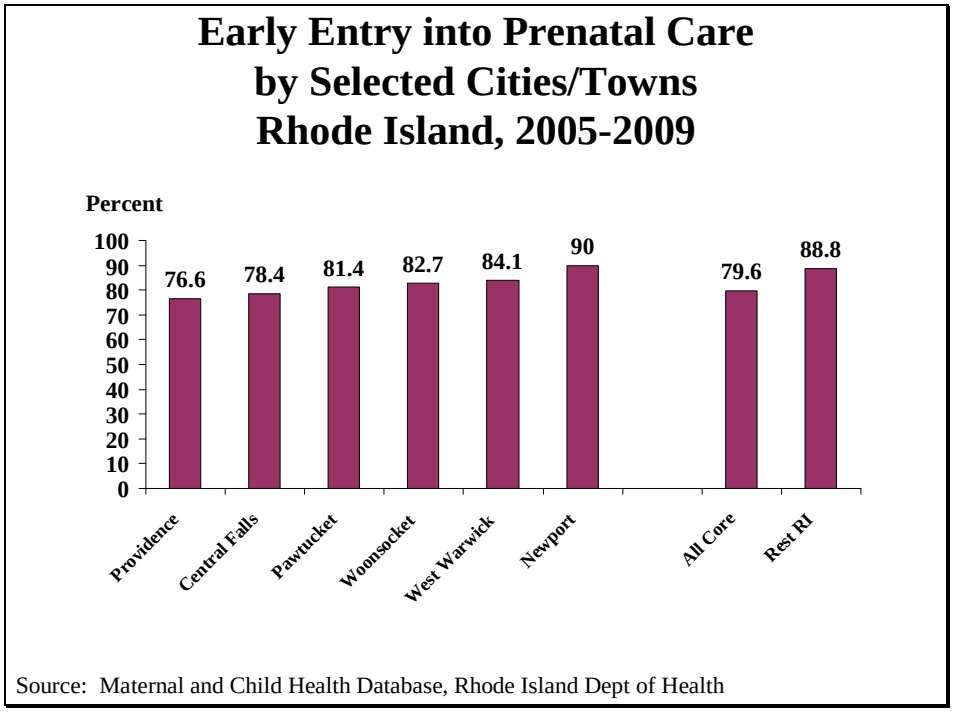


Geographic Disparities

Rates of early entry into prenatal care also differ among those living in lower socioeconomic areas (e.g. the core cities) and those living in the rest of the state (Figure 19). Women residing in the core cities were less likely to receive prenatal care in the first trimester (79.6%) compared with women living in the rest of the state (88.8%). For example, during 2005-2009, 76.6% of women living in Providence received prenatal care in the first trimester compared to 92.5% of women living in East Greenwich, a community of high socioeconomic status. Figure 19 shows that variation exists among the core cities, with prenatal care rates ranging from 76.6% (Providence) to 90.0% (Newport).

Looking only at 2009 data (provisional), the trends described continue where women residing in the core cities are less likely to receive prenatal care in the first trimester (81.5%) than women living in the rest of the state (88.5%). 2009 data show that Newport residents continued to have the highest rates of first trimester care (92.8%), and residents of Providence had the lowest rates (79.6%).

Figure 19

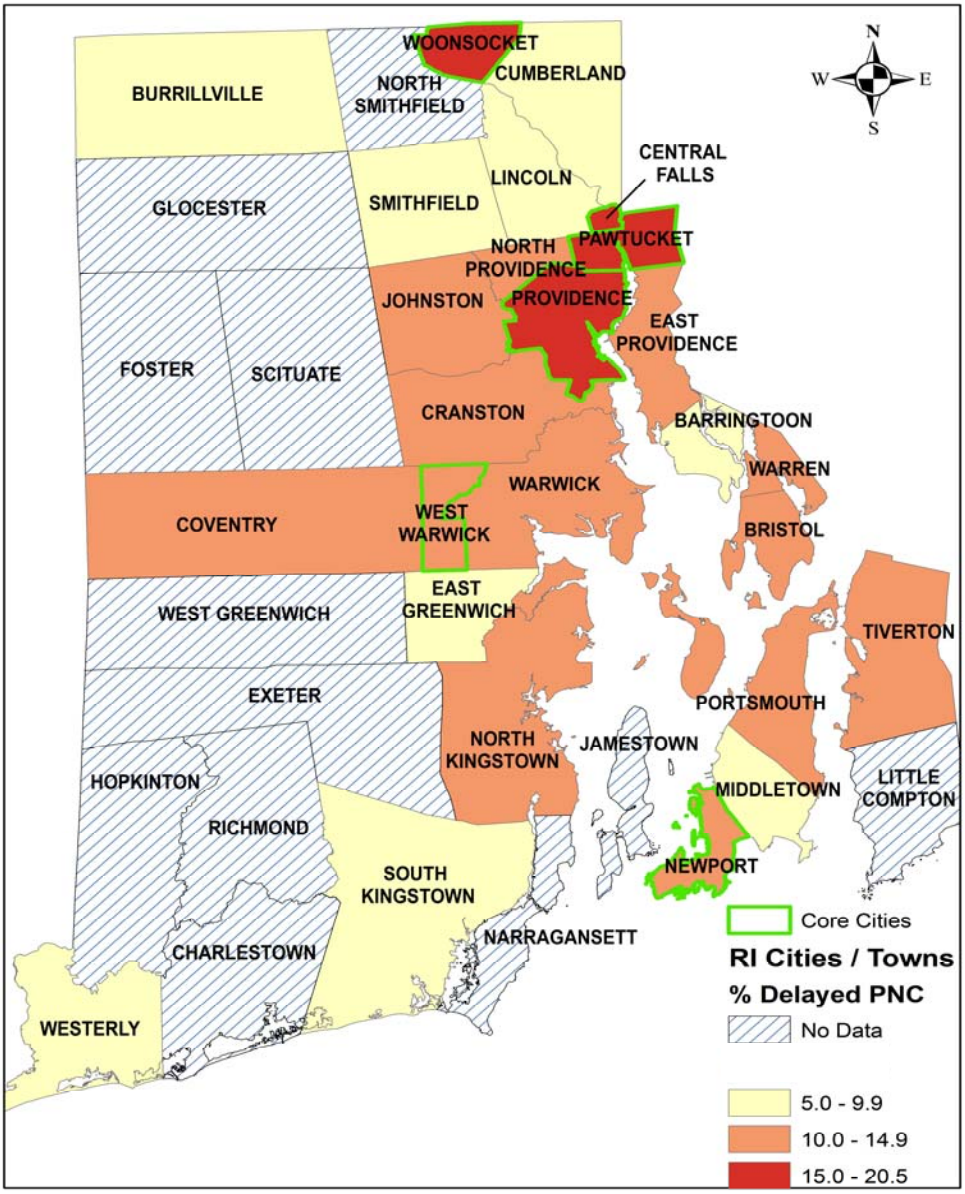


Source: Maternal and Child Health Database, Rhode Island Dept of Health

Figure 20 shows the proportion of communities whose residents began prenatal care after the first trimester or received no prenatal care during their pregnancy ("delayed prenatal care"). The map utilizes birth data collected by the Newborn Developmental Risk Screening Program during 2004-2008. Central Falls, Pawtucket, Providence, and Woonsocket had the highest rates (15.9%-20.5%) of delayed prenatal care during this period.

Figure 20

Delayed Prenatal Care by City/Town, Rhode Island, 2004-2008



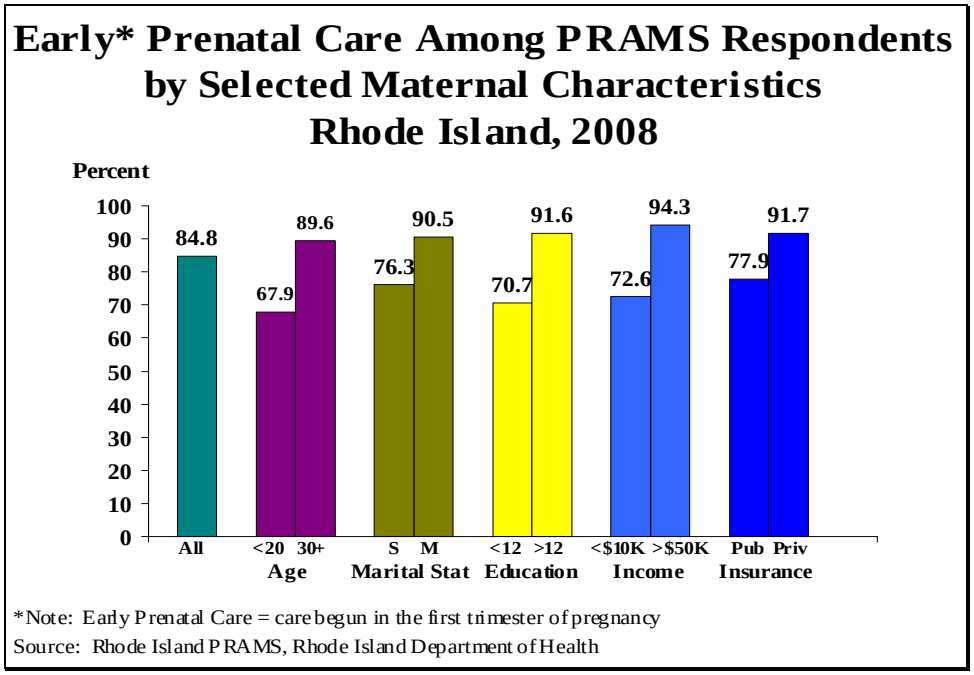
Maternal Characteristics

Data from the Rhode Island PRAMS survey indicate that among women who gave birth during 2004-2008, 84.8% started prenatal care in the first trimester (Figure 21). This figure differs slightly from the data presented above which used birth certificate data. One of the main reasons for this difference is that the CDC PRAMS methodology defines first trimester as less than 12 weeks, whereas the National Center for Health Statistics (NCHS)

defines the first trimester as less than 13 weeks for birth certificate data. Other factors that could contribute to the difference include different wording of the question on PRAMS vs. the birth certificate and possible recall bias of PRAMS respondents since the survey is not completed until, on average, 3 months after delivery. The data presented below represent characteristics of PRAMS respondents based on the PRAMS first trimester definition of less than 12 weeks.

Among PRAMS respondents who gave birth during 2008, 84.3% of respondents received prenatal care in the first trimester. Disparities continue to persist with lower rates among teens (67.9%), single women (76.3%), women with less than a high school education (70.7%), women with annual household incomes of less than $10,000 (72.6%), and women with public insurance (77.9%).

Figure 21



Tobacco Use During Pregnancy

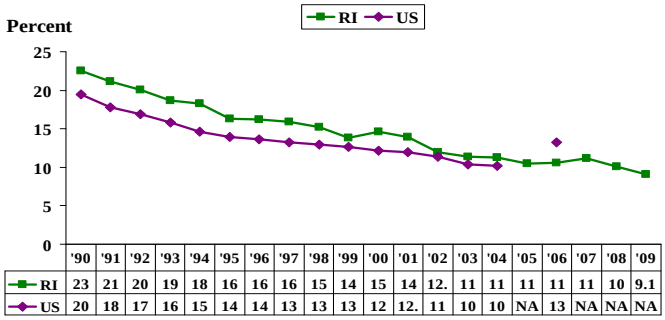
Babies born to women who smoke while pregnant are at a higher risk for adverse birth outcomes, including low birthweight (less than 5.5 lbs) and prematurity (less than 37 weeks gestation). Although the percentage of Rhode Island women who reported they smoked during their pregnancy has been on the decline, rates vary by age, race/ethnicity, and town of residence. Rhode Island's rates have also been higher than the nation, although the gap has been narrowing.

Figure 22 shows that over the past 20 years, tobacco use among pregnant women in Rhode Island has decreased by nearly 60%, from 22.5% in 1990 to 9.1% in 2009. A similar trend has been seen nationally, where rates have dropped by approximately 48%, from 19.5% in 1990 to 10.2% in 2004 (most current data available).

According to provisional 2009 birth certificate data, the rate of tobacco use during pregnancy among Rhode Island women decreased to 9.1%.

Figure 22

Tobacco Use Among Pregnant Women
Rhode Island and United States, 1990-2009



	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
RI	23	21	20	19	18	16	16	16	15	14	15	14	12.	11	11	11	11	11	10	9.1
US	20	18	17	16	15	14	14	13	13	13	12	12.	11	10	10	NA	13	NA	NA	NA

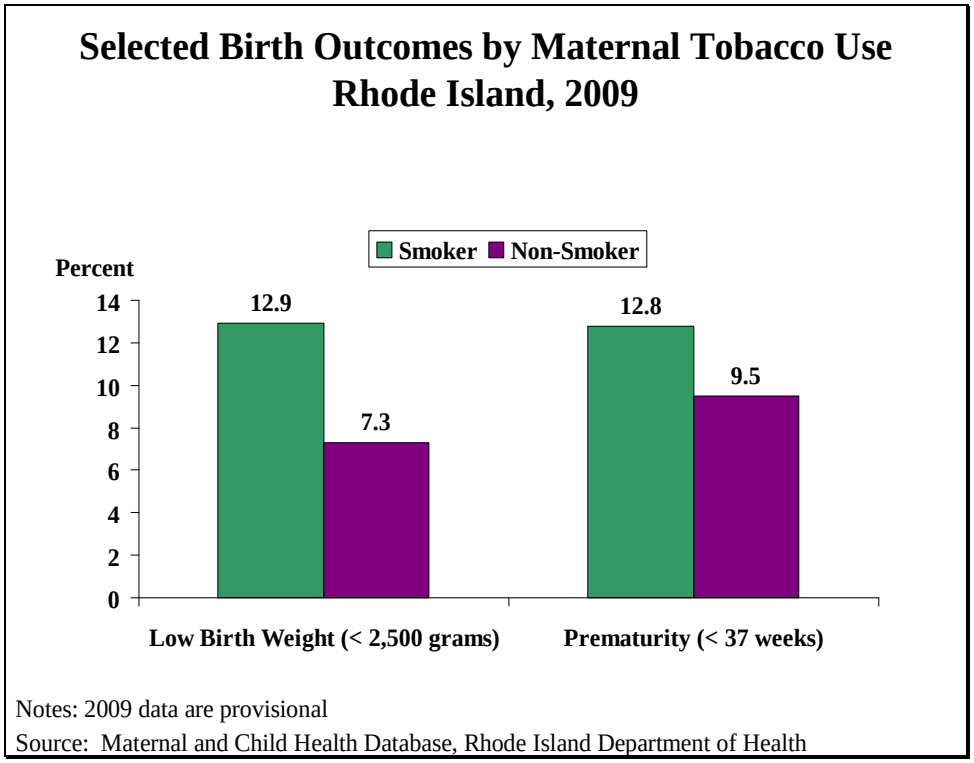
Note: Rhode Island 2009 data are provisional

Sources: Maternal and Child Health Database, Rhode Island Department of Health;
Health, United States, 2004; and *National Vital Statistics Report,* Sept 2006, Centers for Disease Control and Prevention

Rhode Island birth certificate data indicate that nearly one in nine women who gave birth during 2005-2009 stated they smoked cigarettes while pregnant. During this period, there were 60,879 live births, and mother's smoking status was determined for 58,823 (96.6%). A total of 6,114 (10.4%) mothers who gave birth during 2005-2009 reported they had smoked while pregnant. This figure represents a decline from the 2000-2004 period, when 12.7% of women reported they smoked during their pregnancy.

Figure 23 compares the rates of low birthweight and prematurity among smokers and non-smokers. Women who smoked were more likely to deliver a low birthweight and/or preterm baby compared to women who did not. Between 2005 and 2009, rates of low birthweight and prematurity decreased slightly among women who smoked during pregnancy compared to women who did not smoke. However, it is important to note that women who did not smoke during pregnancy had better outcomes than those who smoked during pregnancy. During 2009, women who smoked during pregnancy were almost twice as likely to have a low birthweight baby (12.9%) compared to women who did not smoke (7.3%). While the low birthweight rate decreased slightly from 13.1% (2005) to 12.9% (2009) among women who smoked, the rate increased slightly among women who did not smoke, from 7.0% to 7.3%, respectively. Similarly, during 2009, 12.8% of women who smoked during pregnancy delivered a preterm baby compared to 9.5% of women who did not smoke. Between 2005 and 2009, the prematurity rate decreased among women who smoked (from 13.7% to 12.8%), and the rate among women who did not smoke decreased slightly from 9.8% (2005) to 9.5% (2009). It is important to note that during this period, the proportion of babies born at low birthweight or prematurely to smokers has been declining as the total number of babies born low birthweight and prematurely has been rising. Higher proportions of babies are being born at low birthweight or prematurely to women who did not smoke during their pregnancy. Both low birthweight and prematurity are discussed in more detail in later sections.

Figure 23



Notes: 2009 data are provisional
Source: Maternal and Child Health Database, Rhode Island Department of Health

Tobacco Use During Pregnancy by Age

According to provisional 2009 data, the percentage of women who use tobacco during pregnancy generally decreases with age. Teens aged 15-19 (12.2%) and women aged 20-24 (14.5%) had the highest rates of tobacco use during pregnancy, where approximately one out of four smoked while they were pregnant. Women aged 35-39 had the lowest rate of smoking during pregnancy (4.8%) followed by women aged 40-44 (5.5%).

When comparing the 2000-2004 and 2005-2009 periods, the rates of tobacco use among pregnant women in Rhode Island decreased by 18.1%. Although rates decreased among women in all age groups, women aged 15-19 experienced the largest decrease (28.9%). Women aged 35-39 experienced the second largest decrease in rates of maternal tobacco use (25.0%). Table 1 below compares the changes in smoking rates among different age groups.

Table 1: Changes in the Percent of Mothers Who Smoked During Pregnancy by Age of Mother Rhode Island, 2000-2004 and 2005-2009

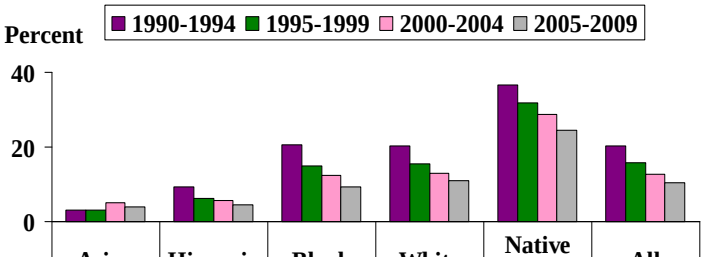
Age Group	2000-2004	2005-2009	% Change
15-19	19.7	14.0	-28.9
20-24	20.7	16.7	-19.3
25-29	12.0	11.2	-6.7
30-34	8.0	6.1	-23.8
35-39	8.0	6.0	-25.0
40-44	7.3	6.5	-11.0
All Ages	12.7	10.4	-18.1

Racial Disparities

Figure 24 compares the rates of smoking during pregnancy among racial/ethnic groups during four five-year periods: 1990-1994, 1995-1999, 2000-2004, and 2005-2009. Tobacco use during pregnancy has decreased over the past 20 years for all racial and ethnic groups except Asians. Asian women experienced an increase during 2000-2004, although their rates have declined in the most recent time period and overall have the lowest rates of any racial/ethnic group during any time period. Native Americans have the highest rate of tobacco use during pregnancy; caution should be used when looking at these rates due to relatively small numbers of this sub-population and instability of their rates over time.

Figure 24

Tobacco Use During Pregnancy by Race/Ethnicity Rhode Island, 1990-2009



	Asian	Hispanic	Black	White	Native American	All
1990-1994	3.2	9.4	20.7	20.4	36.6	20.4
1995-1999	3.2	6.2	15.0	15.6	31.7	15.7
2000-2004	5.0	5.5	12.5	12.9	28.7	12.7
2005-2009	3.9	4.5	9.4	11.1	24.5	10.4

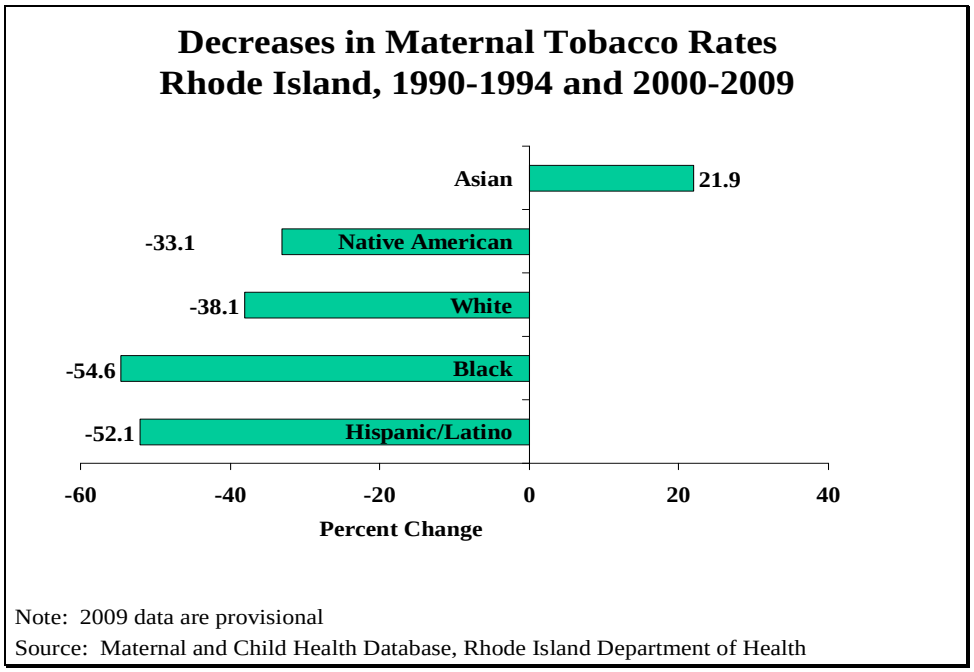
Note: 2009 data are provisional
Source: Maternal and Child Health Database, Rhode Island Department of Health

Table 2 and Figure 25 compare the rates by race/ethnicity during 1990-2004 and 2005-2009. Those of Black/African American race experienced the largest decrease (54.6%), followed by Hispanic/Latino ethnicity (52.1%), Whites (38.1%), and Native Americans (33.1%). Although Asians have had the lowest maternal tobacco rates compared to the other racial/groups, they were the only group that experienced an increase (21.9%) between 1990 and 2009, from 3.2% to 3.9%. Provisional data for 2009 show that Native Americans continue to have the highest rates of tobacco use during pregnancy (20.0%), and Asians have the lowest rate (4.0%). Whites have a rate of 11.6%, followed by Blacks/African/Americans (8.5%), and Hispanics (4.1%).

Table 2: Changes in the Percent of Mothers Who Smoked During Pregnancy by Maternal Race/Ethnicity in Rhode Island, 1990-1994 and 2005-2009

Racial/Ethnic Group	1990-1994	2005-2009	% Change
Native American	36.6	24.5	-33.1
White	20.4	11.1	-38.1
Black/African American	20.7	9.4	-54.6
Hispanic/Latino	9.4	4.5	-52.1
Asian	3.2	3.9	+21.9
All Rhode Island	20.4	10.4	-49.0

Figure 25



Characteristics of Women Who Smoked During Pregnancy

According to data from the Rhode Island PRAMS Survey, 22.7% of women who gave birth during 2004-2008 reported they had smoked three months before they became pregnant, and 11.9% had smoked in the last three months of their pregnancy. The rate of smoking during pregnancy reported by PRAMS respondents (11.9%) is slightly higher than the rate reported on the birth certificate (10.4%) among women who gave birth during 2005-2009. 2008 data from RI PRAMS show that rates of smoking during the last three months of pregnancy vary significantly by age, educational level, marital status, race/ethnicity, household income, and health insurance (Figure 26). For example:

- Women with less than a high school education (19.4%) were almost four times more likely to smoke during their pregnancy than women who had more than a high school education (5.3%);
- Single women (18.9%) were more than four times more likely to smoke than married women (4.3%);
- Respondents aged less than 20 (17.3%) were more than twice as likely to smoke than respondents aged 30 or older (7.0%);
- Women who had health insurance coverage through Medicaid/Rite (public) Care (16.5) were three times more likely to smoke during their pregnancy than women with private insurance (5.8%);
- Women with annual household incomes of less than $24,999 (17.5%) were nearly four times more likely to smoke during their pregnancy women with incomes of $50,000 or more (4.5%);
- Non-Hispanic women (12.6%) were five times more likely to smoke during their pregnancy than Hispanic women (2.3%);

Figure 26

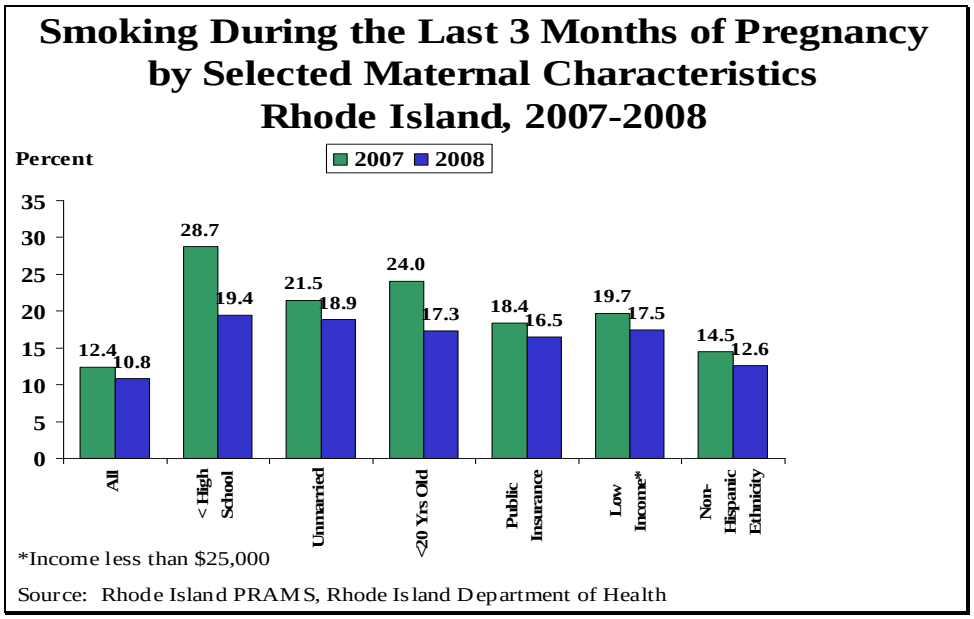
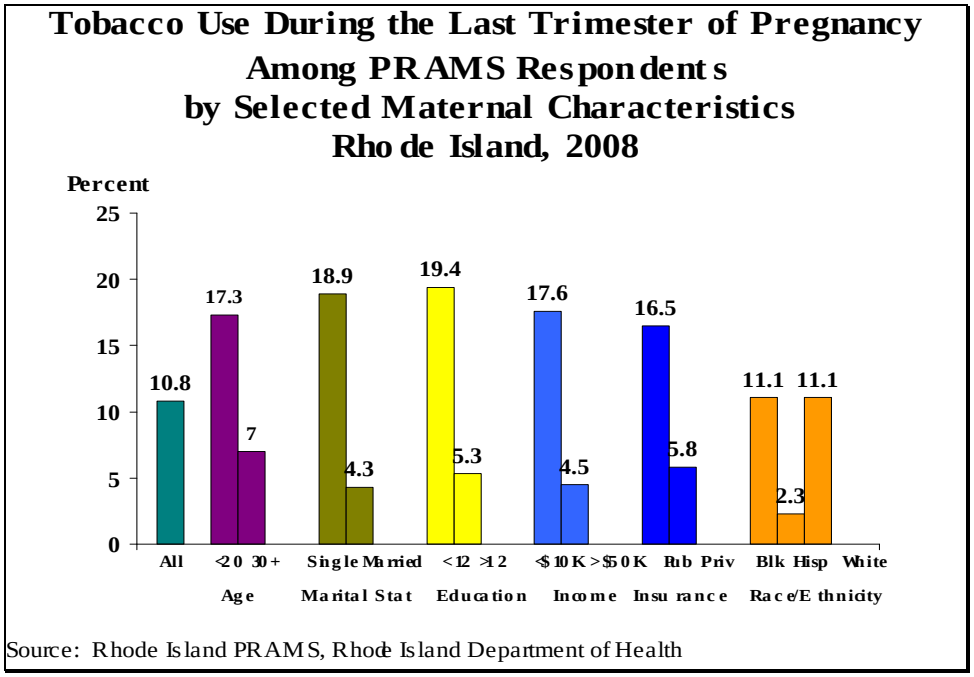


Figure 27 reflects the differences in rates of smoking during the last trimester of pregnancy among PRAMS respondents during 2008 across multiple categorical responses. PRAMS data indicate that there was a decrease in

the proportion of respondents who reported they smoked during the last trimester of their pregnancy during 2007 (12.4%) and 2008 (10.8%). As described above, rates continue to be higher among specific population groups (teens, single women, those with public insurance, etc.). Between 2007 and 2008, there was a decrease across all categories presented.

Figure 27



Cesarean Section Deliveries

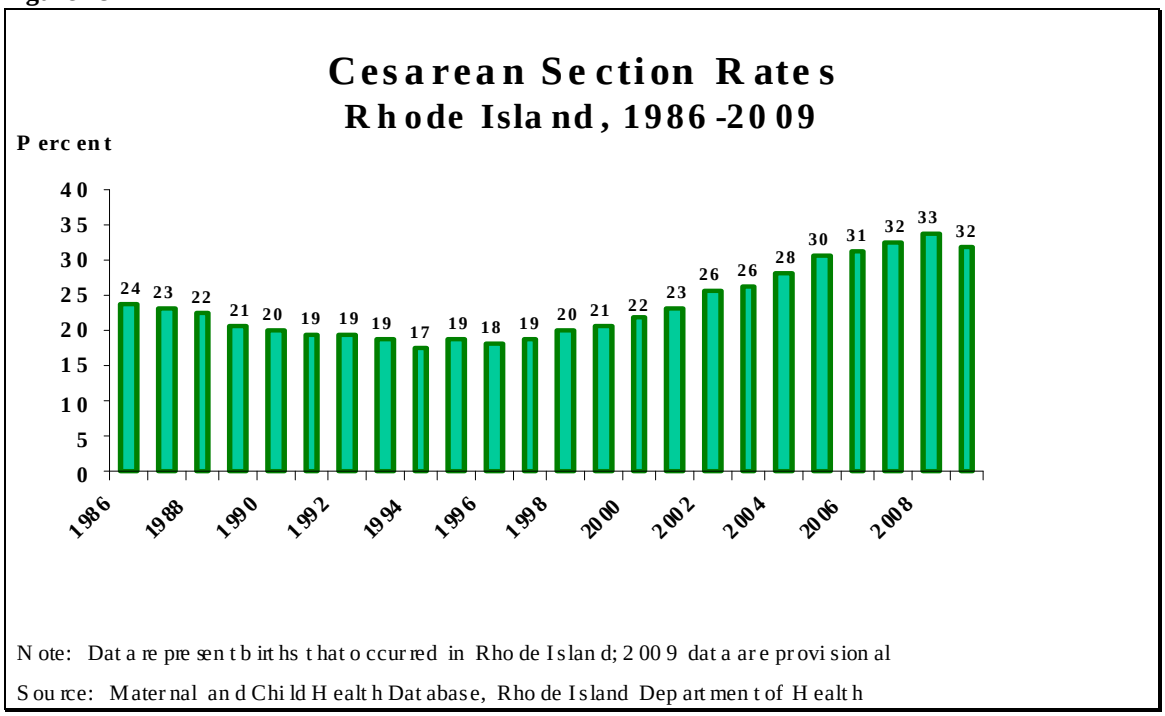
During the late 1980's and early 1990's, the rate of cesarean section deliveries in Rhode Island decreased. In 1986, 23.8% of deliveries in Rhode Island were by C-section (3,166 C-sections among 13,284 deliveries) and by 1994, this figure dropped to a low of 17.3% (2,452 C-sections among 14,198 deliveries). This downward trend began to shift back up in 1995 and the C-section rate rose to a high of 33.4% in 2008 (Figure 28).

Cesarean section rates were re-calculated using birth certificate data. The primary cesarean rate was defined as the number of primary cesarean deliveries divided by the total number of deliveries minus the number of previous cesarean deliveries including Vaginal Birth after Cesarean Section (VBACs). The repeat cesarean rate was defined as the number of repeat cesarean deliveries divided by the total number of repeat cesarean deliveries and VBACs. The VBAC rate was defined as the number of VBACs divided by the total number of repeat cesarean deliveries and VBACs.

Data indicate that the C-section rate decreased slightly in Rhode Island from a recent high of 33.4% in 2008 to 32.7% in 2009 (provisional data). Rhode Island's recent C-section rates are now higher than that of the nation. To put this in perspective, in 2007, the cesarean rate for the nation was the highest ever reported in the United States. There were 1.4 million cesarean births in the U.S. in 2007, representing approximately one-third of all births in the United States. Following a decline in the early 1990s (similar trends reported in Rhode Island), the

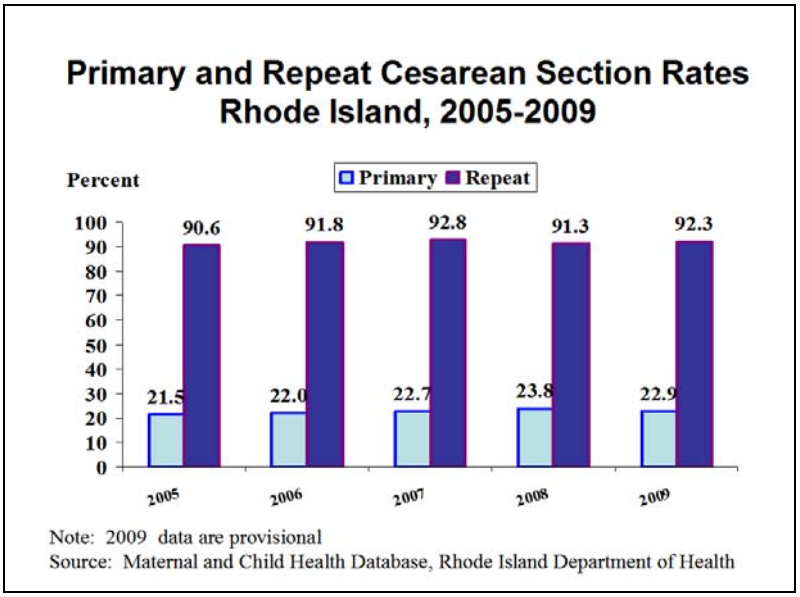
US cesarean rate increased by 53% from 1996 to 2007, from 21% to an all-time high of 31.8%. The number of cesarean births increased by 71% from 1996 (797,119) to 2007 (1,367,049).

Figure 28



Both the primary and repeat C-section rates, have continued to change over the years (Figure 29). These primary and repeat rates are higher than those reported in 1986, when the primary and repeat C-section rates were 14.4% and 9.4%, respectively. During 1986-1994, both primary and repeat rates had dropped to 11.2% and 6.1%. However, during 1994-2004, the primary rate rose by 58.0% and the repeat rate by 72.1%. Also, during this period, the number of VBACs decreased from 735 (5.2% of deliveries) in 1994 to 292 (2.2% of deliveries) in 2004. During 2009, of the 3,739 C-sections, 2,247 (60.1%) were primary and 1,492 (39.9%) were repeat sections. In this year, the primary rate was 22.9% and the repeat rate was 92.3%. In 2009, there were 7525 vaginal births (65.9%) and 124 vaginal births after cesarean (1.1%). This decrease in VBACs may be due to fear of malpractice lawsuits and changing opinions on their safety.

Figure 29



Disparities in Cesarean Section Rates by Maternal Characteristics

Disparities in C-section rates exist among racial/ethnic groups, insurance, and geographical area of residence. Provisional data for 2009 indicate that Whites had the highest C-section (35.2%) while Hispanics/Latinos had the lowest (28.0%). Rates for Blacks/African Americans (31.7%), Native Americans (28.9%), and Asians (26.7%), were also lower than the rate for whites.

Higher C-section rates were seen among women with private insurance (36.9%) than women with public (Medicaid/RIte Care) health insurance (28.6%). Women who resided in the core cities were less likely to have a C-section (28.9%) than women who lived in the rest of the state (36.4%). The core city with the lowest C-section rate was Providence (26.6%) and the highest was Central Falls (36.9%), although proportionately, the total number of births in Central Falls was relatively low (N=282).

3B. INFANTS

Infant Mortality

Infant mortality rates are associated with maternal health, quality of and access to medical care, socio-economic conditions, and public health practices. Communities with multiple problems such as poverty, unemployment, and low literacy levels tend to have higher infant mortality rates than more advantaged communities.

The two chief causes of infant death are birthweights of less than 1500 grams and prematurity. Other leading causes of infant death include congenital abnormalities and malformations, Sudden Infant Death Syndrome (SIDS), maternal complications, and unintentional injuries. Nationwide, approximately 20% of infant deaths are attributed to birth defects, compared with 14% in Rhode Island. The majority of birth defects affect the cardiovascular system.

Rhode Island's small population (and relatively small number of infant deaths) results in infant mortality rates that fluctuate from year to year (Figure 30). Although infant mortality rates declined during the 1970's and 1980's and reached a low in 1994 of 5.0 (the lowest in the country that year), progress has slowed. The same trend can be seen nationally where the infant mortality rate has been decreasing, but there has been little or no improvement since 1997 (Figure 31). Although Rhode Island has experienced rates below 6.0 in 1994 (5.0), 1996 (5.2), 1999 (5.7), 2004 (5.3), 2008 (5.9), and provisionally 2009 (5.9), the annual fluctuations make it difficult to predict whether Rhode Island will achieve and maintain the Healthy People 2010 objective of 4.5 (Figure 31).

Between 2004 and 2008, 385 infants died in Rhode Island before their first birthday. Seventy-six percent of infants who died during this time period were low birthweight, 22% were born at normal weights and 2% had unknown birthweights. Of the 385 infant deaths between 2004 and 2008 in Rhode Island, 295 (77%) occurred in the neonatal period (during the first 27 days of life). Neonatal mortality is generally related to short gestation and low birthweight (less than 2,500 grams), malformations at birth, and/or conditions occurring in the perinatal period.

Between 2004 and 2008, 90 (23%) of the 385 infant deaths in Rhode Island occurred in the post-neonatal period (between 28 days and one year after delivery). Nationally, most of the progress in reducing the rate of infant mortality has resulted from improving outcomes during the post-neonatal period.

During 2008 and 2009, the number of infant deaths among Rhode Island residents was steady. Provisional 2009 data indicate that 67 infants died before their first birthday among the 11,416 resident births that year, resulting in an infant mortality rate of 5.9 per 1,000. This rate represents a 19.2% decrease from the 2007 rate of 7.3.

Figure 30

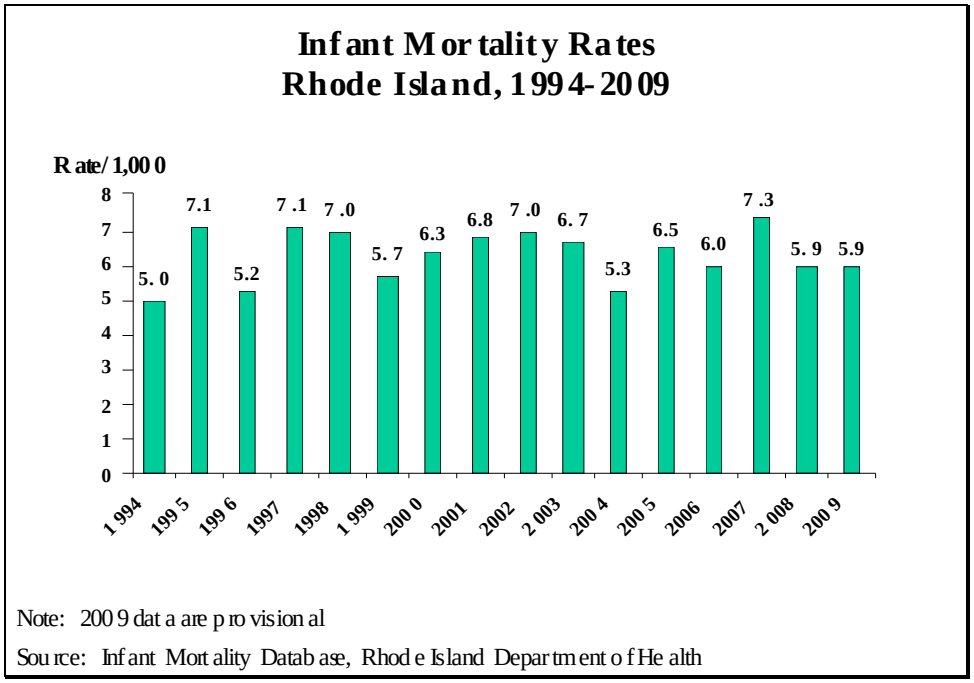
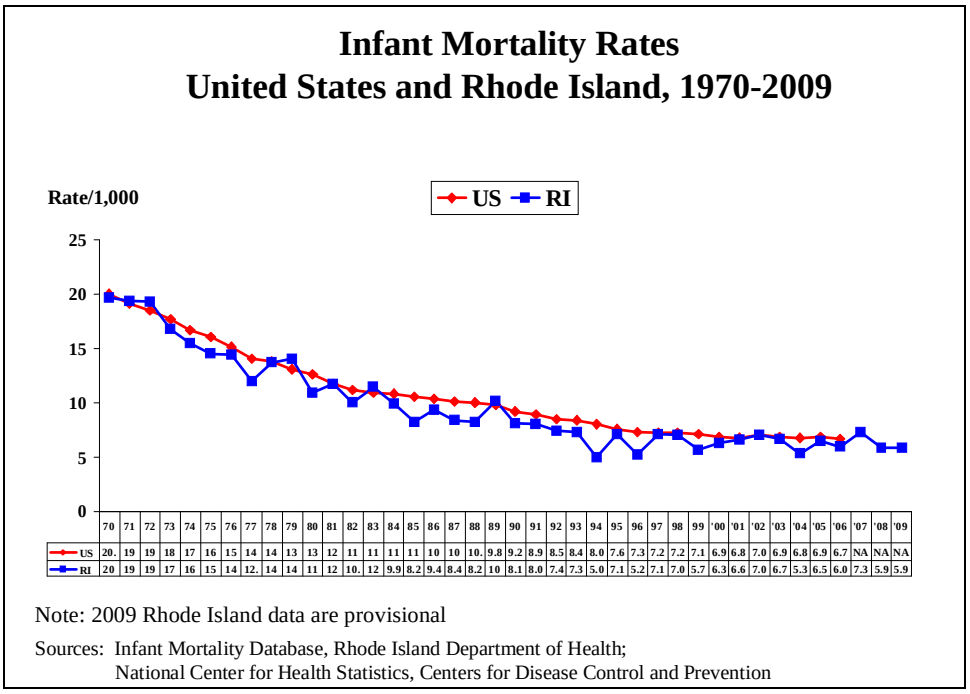


Figure 31



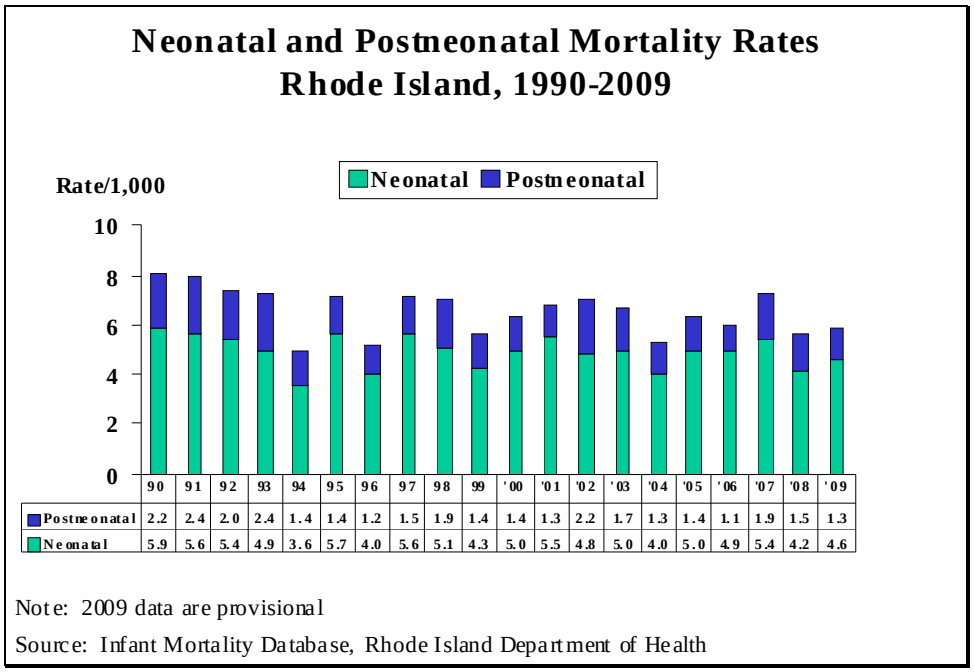
	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
US	20.	19	19	18	17	16	15	14	14	13	13	12	11	11	11	11	10	10	10.	9.8	9.2	8.9	8.5	8.4	8.0	7.6	7.3	7.2	7.2	7.1	6.9	6.8	7.0	6.9	6.8	6.9	6.7	NA	NA	NA
RI	20	19	19	17	16	15	14	12.	14	14	11	12	10.	12	9.9	8.2	9.4	8.4	8.2	10	8.1	8.0	7.4	7.3	5.0	7.1	5.2	7.1	7.0	5.7	6.3	6.6	7.0	6.7	5.3	6.5	6.0	7.3	5.9	5.9

During 1990-2009, the neonatal mortality rates fluctuated from a high of 5.9 (1990) to a low of 3.6 (1994). Similarly the post-neonatal rates have ranged from 2.4 (1991, 1993) to 1.2 (1996, 2004). Figure 32 shows the annual variation and illustrates that the years with the lowest neonatal mortality rates (1994, 1996, 1999, and 2004)

were the years with the lowest overall infant mortality rates. Neonatal mortality can be an indicator of access to prenatal and perinatal care and post-neonatal mortality can be an indicator of access to pediatric care.

Between 2008 and 2009, the neonatal mortality rate among Rhode Island residents increased slightly by 5%, from 4.4 to 4.6. Similarly, the post-neonatal mortality rate decreased by 13% from 1.5 in 2008 to 1.3 in 2009. It should be noted that data for 2009 are provisional.

Figure 32



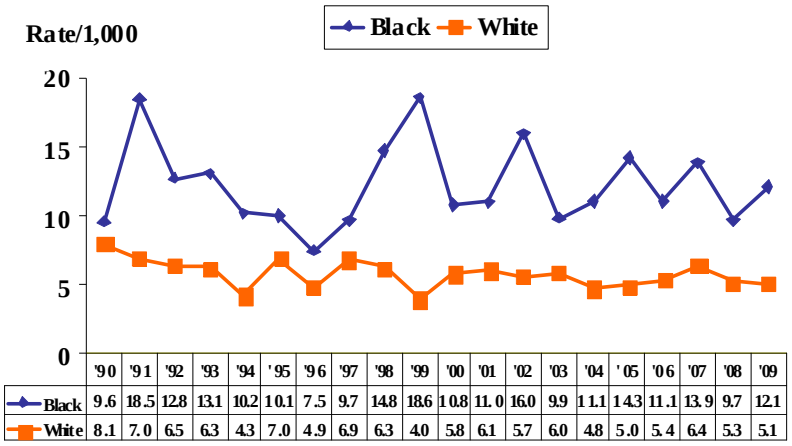
	90	91	92	93	94	95	96	97	98	99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
Postneonatal	2.2	2.4	2.0	2.4	1.4	1.4	1.2	1.5	1.9	1.4	1.4	1.3	2.2	1.7	1.3	1.4	1.1	1.9	1.5	1.3
Neonatal	5.9	5.6	5.4	4.9	3.6	5.7	4.0	5.6	5.1	4.3	5.0	5.5	4.8	5.0	4.0	5.0	4.9	5.4	4.2	4.6

Racial Disparities

Substantial disparities exist in infant mortality rates among different racial/ethnic groups, with higher rates reported for Blacks/African Americans and lower rates among Asians and those of Hispanic/Latino ethnicity. These disparities have persisted over many years, and the rate for African Americans has remained about 1.5 to 2 times higher than the rate for Whites (Figure 33). During 1990-2009, the ratio of Black to White infant mortality rates peaked in 1999, when it rose to 4.6 (18.6:4.0). Although during 1995-1997, the gap appeared to be narrowing to a ratio of 1.4 (Figure 33).

Racial disparities have continued to persist in Rhode Island's infant mortality rates. Provisional 2009 data indicate that the gap between the Black (12.1) and White (5.1) infant mortality rate increased to a ratio of 2.4, an increase from 1.8 in 2008. Annual Black/African American infant mortality rates are more likely to fluctuate than White rates due to the smaller number of births (~1150 per year) and deaths (~12-18 per year) among Blacks compared to Whites. Factors contributing to the differences in infant mortality rates between Whites and Blacks include higher rates of prematurity and low birthweight among Blacks compared to Whites. These birth outcomes are discussed in more detail later.

Figure 33



	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
Black	9.6	18.5	12.8	13.1	10.2	10.1	7.5	9.7	14.8	18.6	10.8	11.0	16.0	9.9	11.1	14.3	11.1	13.9	9.7	12.1
White	8.1	7.0	6.5	6.3	4.3	7.0	4.9	6.9	6.3	4.0	5.8	6.1	5.7	6.0	4.8	5.0	5.4	6.4	5.3	5.1

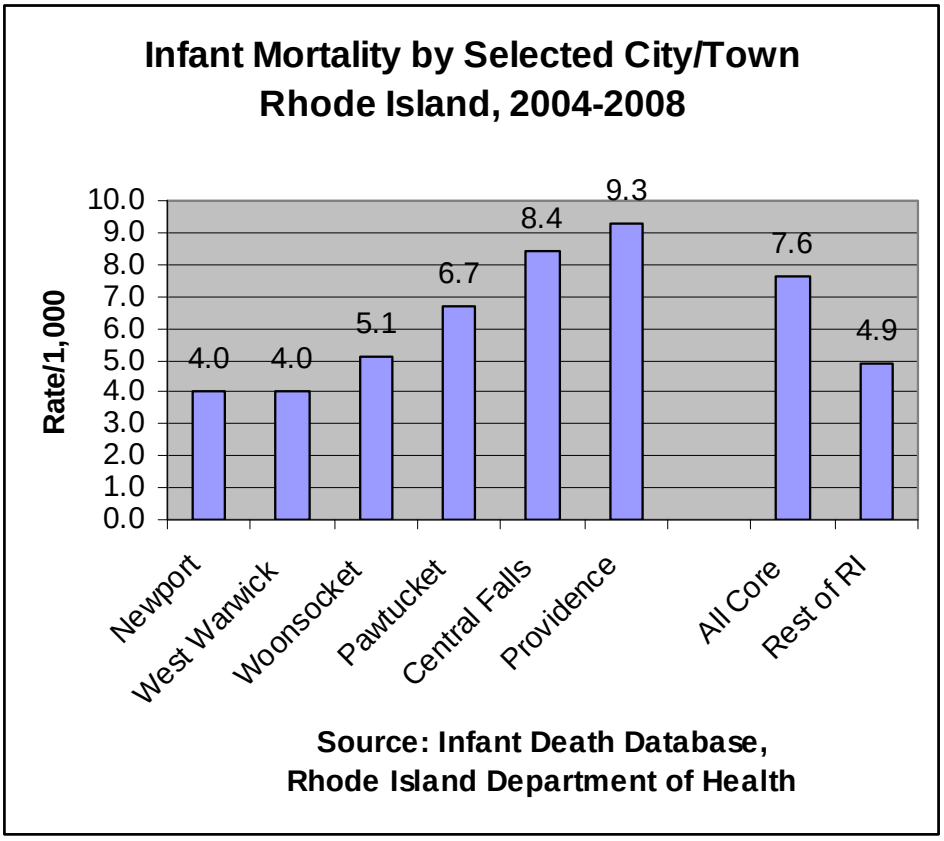
Note: 2009 data are provisional
Source: Infant Mortality Database, Rhode Island Department of Health

In Rhode Island during 2004-2008, the Black infant mortality rate was 12.1 deaths per 1,000 live births, the Asian infant mortality rate was 6.2 per 1,000 live births, and the Native American infant mortality rate was 9.3 per 1,000 live births. All minority groups had infant mortality rates greater than the rate for White infants (5.4 per 1,000 births). The Hispanic infant mortality rate was 8.2 per 1,000 live births compared with 7.1 deaths per 1,000 live births among non-Hispanics in Rhode Island. Provisional data for 2009 show that the Black infant mortality rate was 12.1 deaths per 1,000 live births compared to whites with an infant mortality rate of 5.1 deaths per 1,000 live births.

Geographic Disparities

Infants born to mothers residing in the six core cities have a higher rate of mortality compared with those born in the rest of the state. More than half of the infants who died during 2004-2008 lived in the core cities. Of the 385 infant deaths that occurred during that period, 223 (57.9%) resided in the core cities, resulting in an infant mortality rate of 7.6 compared with 4.9 for the rest of the state. Infants were 1.5 times more likely to die before their first birthday if they lived in the core cities than if they lived in the rest of the state. Infant mortality rates also differed among the core cities, ranging from a low of 4.0 in Newport and West Warwick to a high of 9.3 in Providence (Figure 34).

Figure 34



Infant Mortality and Low Birthweight

One of the factors contributing to the lack of improvement in the infant mortality rate in Rhode Island over the past decade may be the rise in the number of infants born at low birthweight. During 2006-2009, low birthweight (less than 2,500 grams) was associated with 78.5% of the infant deaths. Although very low birthweight infants (less than 1,500 grams) account for only one percent of all births in Rhode Island, they comprise 68.2% of all infant deaths in the state. Infants born under 500 grams comprise one-third (39.7%) of all infant deaths.

Provisional data for 2009 indicate that the proportion of deaths that were among Rhode Island infants with low birthweights decreased from 2006. Specifically, of the 67 infant deaths in 2009, 52 (77.6%) were born < 2,500 grams compared with 82.4% in 2006; 47 (70.1%) were < 1,500 grams compared with 70.3% in 2006; and 26 (38.8%) were less than <500 grams compared with 39.2% in 2006. (Note: these ranges overlap).

Infant Mortality and Insurance Status

During 2001, an analysis of trends and causes of infant mortality by insurance status was conducted in partnership with the Department of Human Services. Since the 1990's were an important time for health care delivery system changes in Rhode Island (the expansion of health care coverage for low income, uninsured families through RIte Care), 1990-1999 linked birth/death data were used for the analysis. A total of 905 infant deaths were

analyzed by year, insurance status, cause of death, and period of death. Rates were calculated using three year moving averages. Data indicate that from 1990 to 1999, the infant mortality rate declined by 30% for infants on Medicaid, from 11.0 to 7.7. Among infants with private insurance, the rate declined by 21.5%, from 6.5 in 1990 to 5.1 in 1999. The gap between the Medicaid and private rate was cut from 4.5 points in 1990 to 2.6 points in 1999. Prematurity/very low birthweight, congenital anomalies, and Sudden Infant Death Syndrome (SIDS) were the top three causes of death among Rhode Island infants on both Medicaid and private insurance. The infant mortality rate was on average 1.6 times higher for infants on Medicaid for every cause of death. The injury death rate (per 100,000 births) for infants on Medicaid (40.2) was five times higher than for infants with private insurance (8.1). The infant death rate for SIDS was four times higher for infants on Medicaid (115.6 per 100,000 births) than for infants with private insurance (29.9).

In Rhode Island, the gap in infant mortality rates between infants with private insurance and those with public insurance has been narrowing, and, in 2005, data indicate the gap may have closed. Three-year moving averages show that during 2002 the infant mortality rate among those covered by Medicaid or RIte Care (8.3) was nearly two times (1.8) higher than the rate among those with private insurance (4.6). However, by 2005, this gap closed, where the infant mortality rate was 5.5 for those with private and public insurance.

Provisional data for 2009 indicate that the gap has opened again. The infant mortality rate among those covered by Medicaid or RIte Care has increased (9.2) compared to the rate among those with private insurance (6.4). This represents a rate that is almost 1.5 times higher for those with public insurance compared to private.

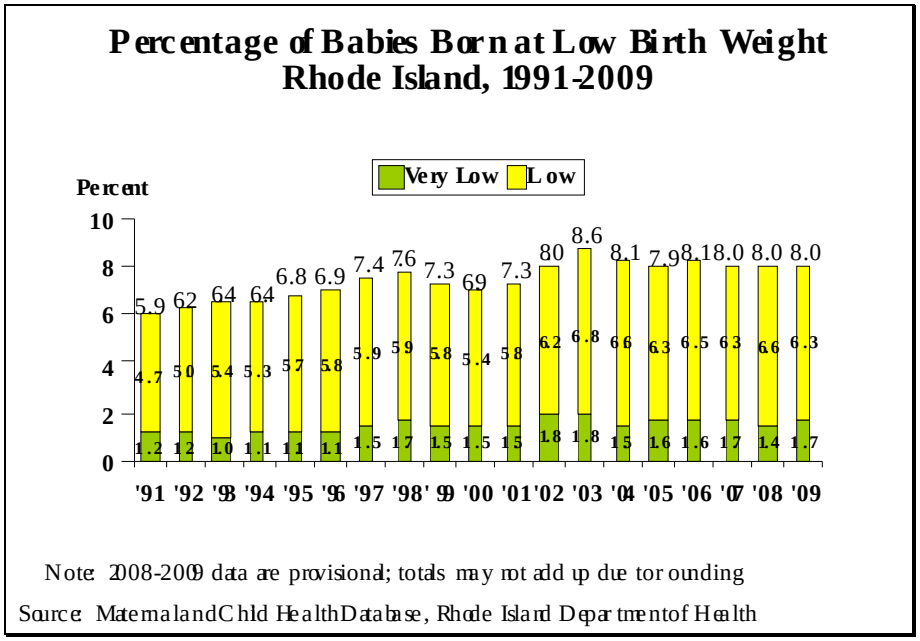
Low Birthweight

During the 1990's, Rhode Island saw a rise in the percentage of babies born at low birthweight (less than 2,500 grams or 5.5 lbs). In 1991, babies born at low birthweights accounted for 5.9% of all births and by 2003, they accounted for 8.6% of all births. Between 2004 and 2008 in Rhode Island, the percentage of low birthweight infants born to mothers under the age of 20 was 9.9%, compared to 7.8% for mothers age 20 and older. During this period, 1.6% (969) of all live births were born at very low birthweight (less than 1,500 grams).

Nationally in 2007, 8.2% of infants were born low birthweight. The 2007 national rate of low birthweight is 17% higher than the 1990 national rate (7.0%). Rhode Island's low birthweight rate increased from 6.2% in 1990 to 8.0% in 2007, a 29% increase.

Provisional data indicate that the low birthweight remained in 2009 at 8.0% (Figure 35). These data represent a decrease from 2003, when the low birthweight rate was at its highest (8.6%) since the 1960's. Specifically, of the 11,416 births among Rhode Island residents in 2009, 195 (1.7%) weighed less than 1,500 grams and 716 (6.3%) weighed between 1,500 and 2,499 grams. The percentage of babies born between 1,500 and 2,499 grams in 2009 (6.3%), represents a 34.0% increase from 4.7% in 1991. Overall the low birthweight increased by 35% during this time period from 5.9% in 1991 to 8.0% in 2009.

Figure 35



Racial Disparities

There is much disparity within the low birthweight rates among different racial and ethnic groups (Figure 36). During 2005-2009, 8.0% of all babies born to Rhode Islanders were born at low birthweights. The low birthweight rate among Native Americans was the highest at 13.7% and was 1.9 times the rate for Whites (7.4%). Low birthweight rates were also higher among Blacks/African Americans (10.6%) and Asians (9.0%) compared to Whites. Those of Hispanic/Latino ethnicity (8.1%) had rates that were lower than other racial/ethnic groups, but above Whites.

During 2005 and 2009, the overall very low birthweight (<1,500 grams) among racial/ethnic groups was highest among Blacks/African Americans (2.5%) and lowest among whites (1.4%) – Asians and Native Americans were in the middle (1.7%, both).

Provisional data for 2009 indicate Native Americans had the highest very low and low birthweights (10.5% and 2.6%, respectively) compared to Whites with the lowest very low and low birthweights (7.3% and 1.5%, respectively). Blacks/African Americans had the second highest rates for both very low and low rates (10.1% and 2.1%, respectively) with slightly higher rates than Asians in both categories (10.0% and 1.9%, respectively). It should be noted that due to small numbers of births among Native Americans annual data are unstable and less reliable.

Geographic Disparities

During 2009, provisional data indicate disparities in low birthweights among babies born to women residing in the core cities. Low birthweights were highest in Woonsocket (10.3%) nearly 1.5 times higher than the lowest core cite rate in West Warwick (7.2%). The core cities had a higher percentage of infants born at low birthweights (8.8%) compared to those residing in the rest of the state (7.1%) (Figure 36). These provisional data indicate the gap in low birthweight rates between those living in the core cities and those living in the rest of the

state continues to persist from previous years. Among those living in the core cities, Providence residents had the highest rate of very low birthweight (2.1%) and Woonsocket residents had the lowest rate of very low birthweight (1.4%) compared to those in the rest of the state (1.3%).

Figure 36

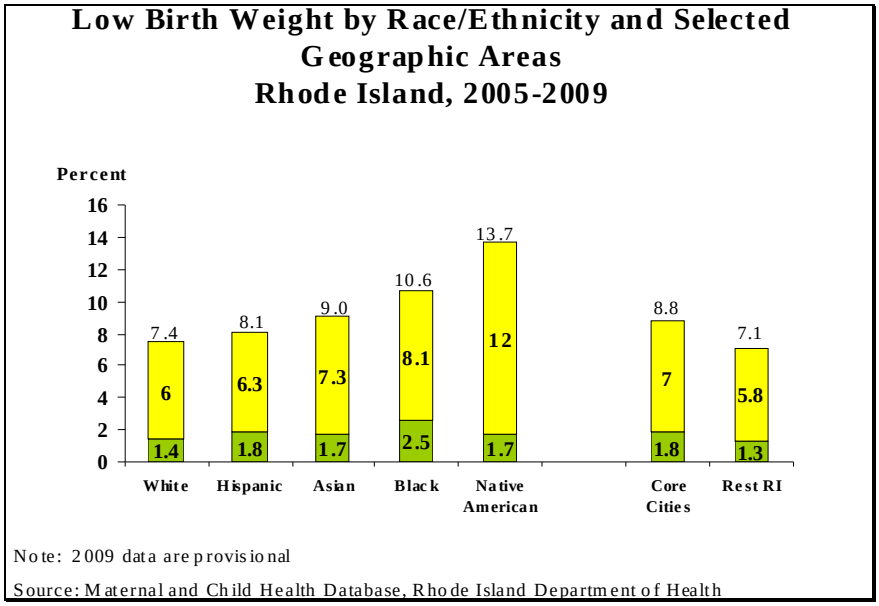
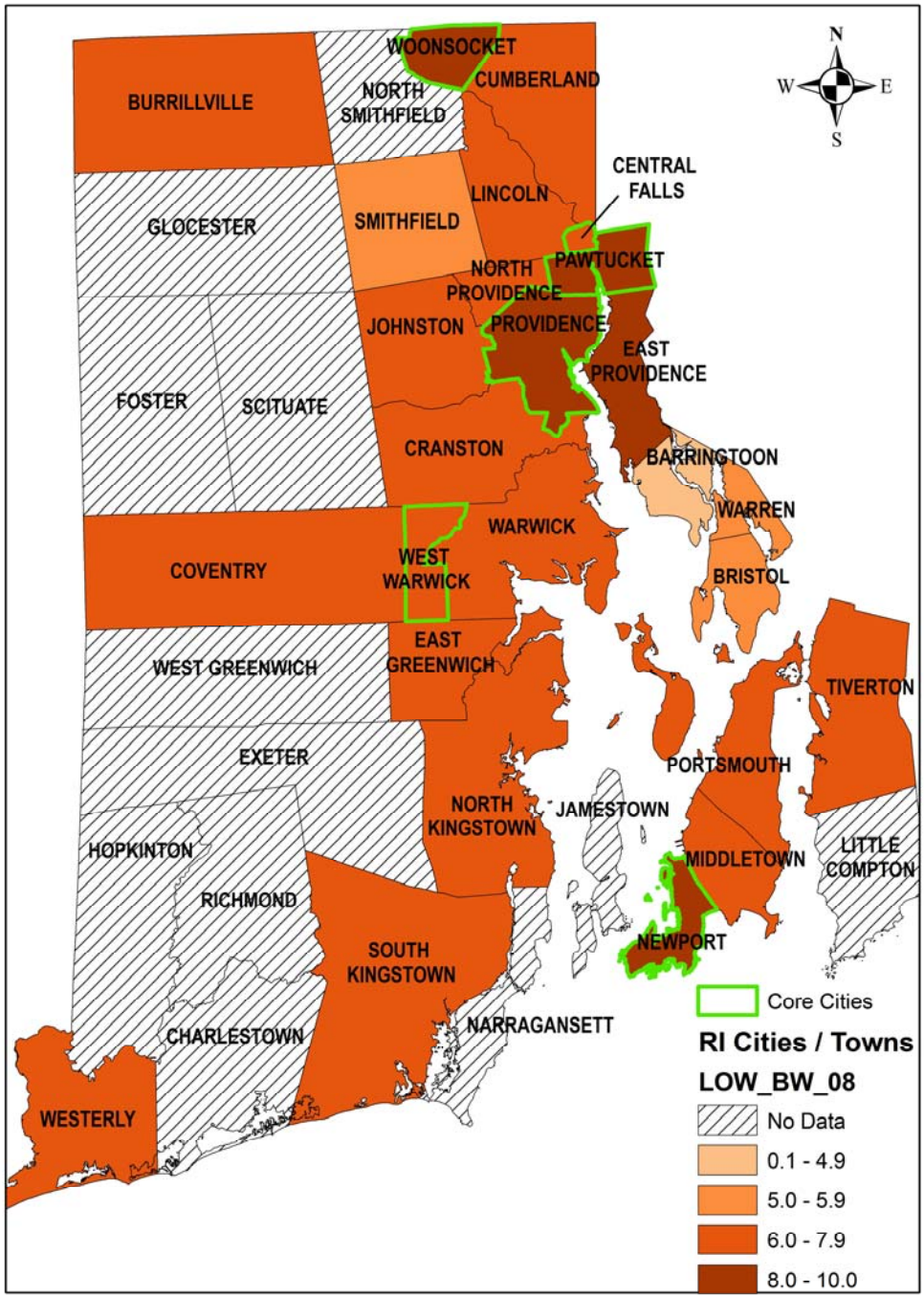


Figure 37 illustrates the distribution of low birthweight throughout the state during 2004-2008. Although the core cities of Central Falls, Pawtucket, Providence and Woonsocket are shown to have the highest rates of low birthweight (6.9%-10.0%), other communities, such as East Providence, Coventry, and Warwick, also had high rates.

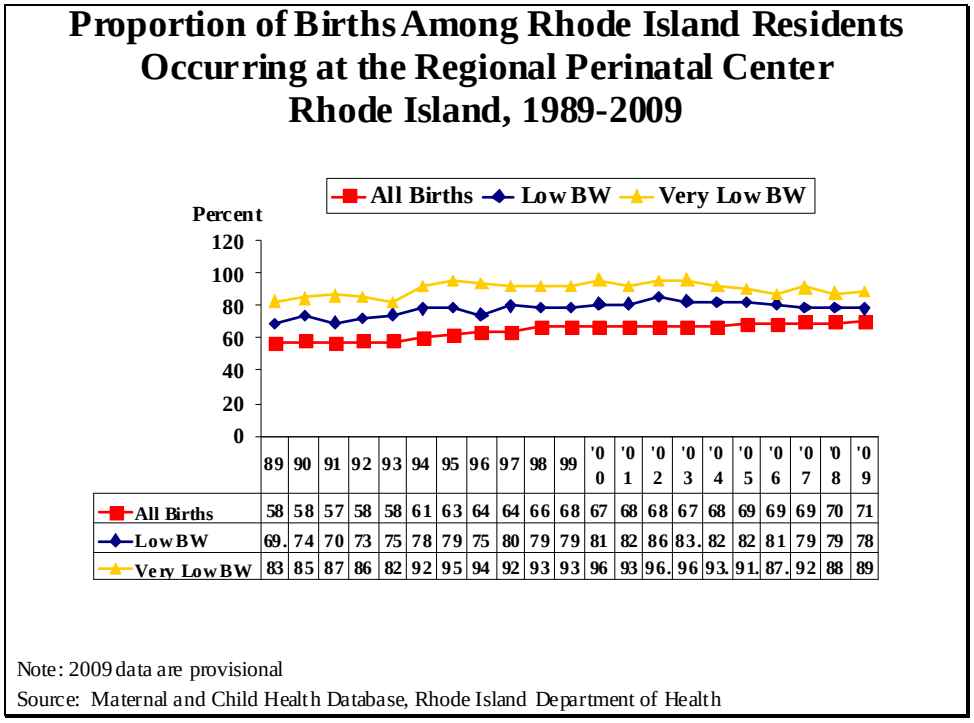
Figure 37
Low Birthweight by City/Town, Rhode Island, 2004-2008



Low Birthweight Babies Born at the Regional Perinatal Center

A high proportion of babies born at low birthweights are delivered at the regional perinatal center (Women & Infants Hospital) indicating that high risk pregnancies are being identified early and are being referred to the perinatal center. As previously described, the number of babies born at low birthweights to Rhode Islanders has been increasing. Over the past 15 years, the proportion of low birthweight babies born at the regional perinatal center has also increased. In 1989, 69% of low birthweight babies and 82.9% of very low birthweight babies were born at the regional perinatal center. By 2003, 915 (83.0%) of the 1,102 babies born at low birthweight and 219 (92.0%) of the 238 babies born at very low birthweight were born at the regional perinatal center. Provisional data for 2009 indicate that 733 (80.5%) of the 911 low birthweight and 174 (89.2%) of the 195 very low birthweight babies were delivered at the regional perinatal center. The majority of the births among Rhode Island residents occur at the regional perinatal center and this proportion has also increased over the past 15 years. In 1989, 57.6% of births were delivered at the regional perinatal center, and by 2009, this proportion rose to 70.7% (Figure 38).

Figure 38



	89	90	91	92	93	94	95	96	97	98	99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
All Births	58	58	57	58	58	61	63	64	64	66	68	67	68	68	67	68	69	69	69	70	71
Low BW	69.	74	70	73	75	78	79	75	80	79	79	81	82	86	83.	82	82	81	79	79	78
Very Low BW	83	85	87	86	82	92	95	94	92	93	93	96	93	96.	96	93.	91.	87.	92	88	89

Preterm Births

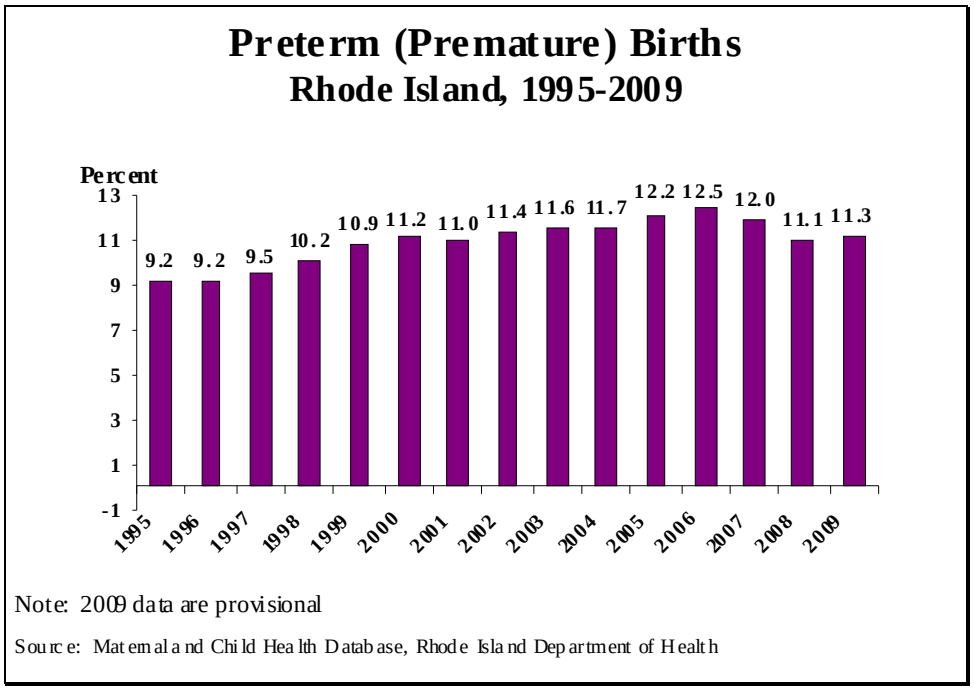
Mirroring the trend of low birthweight, the percentage of babies born prior to 37 weeks or preterm has been rising in Rhode Island as in the nation. Preterm is the leading cause of infant mortality in Rhode Island; nationally, it is the second leading cause after birth defects. Infants born before 37 weeks gestation are at higher risk than infants born full-term for neurodevelopmental, respiratory, gastrointestinal, immune system, central nervous system, hearing, and vision problems, etc. Preschool and school-age children who are born preterm can also experience

learning difficulties, and more behavioral problems later in the life course. Infants born very preterm (<32 weeks gestation) are at highest risk for death and life-long disability. Although not all risk factors for preterm delivery are known, those that have been identified include multiple gestation pregnancy (twins, triplets, or more), previous history of preterm delivery, maternal age, infections, diabetes, certain birth defects, assisted reproductive technology, etc.

Between 1995 and 2006, the percentage of preterm births rose among Rhode Island residents from 9.2% to 12.5%, a 35.9% increase (Figure 39). The 2006 rate was 1.6 times the Healthy People 2010 objective of 7.6%. However, beginning in 2006, the rising trend in preterm births began to change; and by 2008, the prematurity rate had decreased by 11.2%, from 12.5 in 2006 to 11.1 in 2008.

Provisional data for 2009 indicate that the preterm rate in Rhode Island increased slightly to 11.3%, representing a 1.8% increase from the 2008 rate of 11.1%,

Figure 39



Babies that are born less than 32 weeks gestation are considered very preterm and are at higher risk to develop complications. During 2008, 2.0% of Rhode Island babies (n = 241) fell into this category, which is almost double the Healthy People 2010 objective of 1.1%.

The rates of births that are preterm or very preterm vary by maternal age, race/ethnicity, and plurality (singletons, twins, triplets, etc.). The rate of preterm births among women under age 20 between 2004 and 2008 was 13.4%. The preterm birth rate was 15.8% for 15 to 17 year olds and 12.0% for 18 to 19 year olds. Among racial/ethnic groups, more than one in six (17.3%) Native American births were preterm, compared with 14.8% of Black, 13.3% of Asian, and 11.4% of White births. During this time period, 13.4% of births to Hispanic women were preterm (Hispanic women can be of any race). Multiple birth infants are more likely to be born preterm than

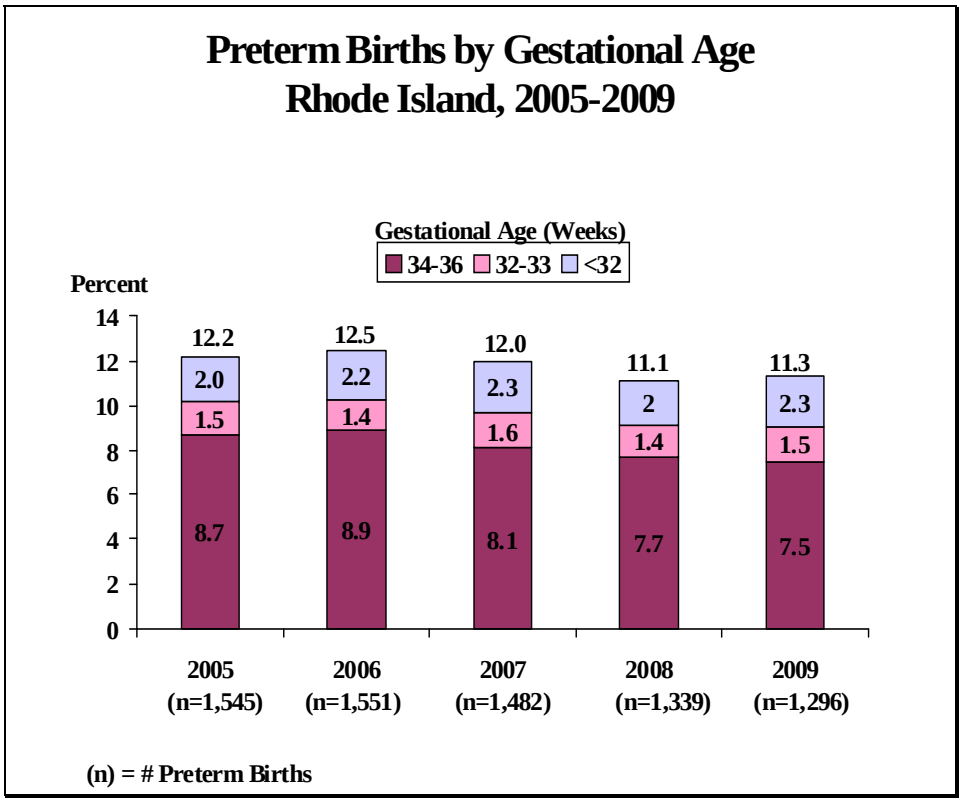
singletons. In Rhode Island between 2004 and 2008, 57.1% of multiple births were preterm, compared with 10.1% of singleton births.

The rate of preterm births for Rhode Island women who smoke is higher than for those who do not. Between 2004 and 2008, 14.7% of births to smokers were preterm, compared with 11.4% of preterm births to women who did not smoke during pregnancy.

Nationally, the preterm birth rate has been on the rise for more than two decades, rising 20% from 1990 to 2006. Between 2007 and 2008 the US preterm rate decreased by 3.0% to 12.3%. In Rhode Island, the decrease between 2007 and 2008 was sharper (7.5%) from 12.0% to 11.1%. While preterm birth occurs in all racial and ethnic groups, nationally the rate is highest for non-Hispanic blacks. Low income women also are at greater risk for pre-term births than higher-income women.

During 2005-2008, the average preterm birth rate in Rhode Island was 11.8%. The majority (70%) of preterm births in Rhode Island during this period were late preterm births (34-36 weeks gestation) (Figure 40). The late preterm rate has declined from 8.7 in 2005 to 7.5 in 2009. The rate of very preterm (<32 weeks) has remained fairly stable at ~ 2% and represents approximately 17% of all preterm births. Nationally, between 2007 and 2008 preterm births decreased by 3% from 12.7% to 12.3, respectively. In RI, the decrease between 2007 and 2008 was sharper (7.5%) from 12.0% to 11.1%, respectively.

Figure 40



In 2007, a statewide task force was assembled to identify opportunities or strategies to reduce the preterm birth rate in Rhode Island. The Prematurity Task Force reviewed data and identified specific topic areas for focus including: poverty, previous preterm birth, adolescents, family planning and tobacco, alcohol, and drug use. In

2008, the Rhode Island Prematurity Task Force identified 23 recommendations based on four major priority areas: previous preterm birth, adolescents, family planning and substance use. Subsequently, the task force developed work plans for the implementation of the recommendations. In 2009-2010, in response to recommendations made by the Prematurity Taskforce, the State developed and implemented changes to the state Birth Certificate: 1) a question was added to the Obstetrician Worksheet regarding how gestational age is determined (e.g., ultrasound, exam, date of last menstrual period, etc.) and 2) questions were added to the birth certificate worksheet that ask about use of fertility drugs and procedures (completed by the mother).

Multiple Gestation Births

Babies born as multiple births (i.e., twins, triplets, and higher order births) are at a higher risk for low birthweight (less than 2,500 grams), prematurity (less than 37 weeks gestation), and infant death (deaths occurring within 364 days of birth) compared with singleton births. Over the past 20 years, Rhode Island has experienced an increase in the number and rate of multiple births, which is a trend that mirrors the rest of the nation.

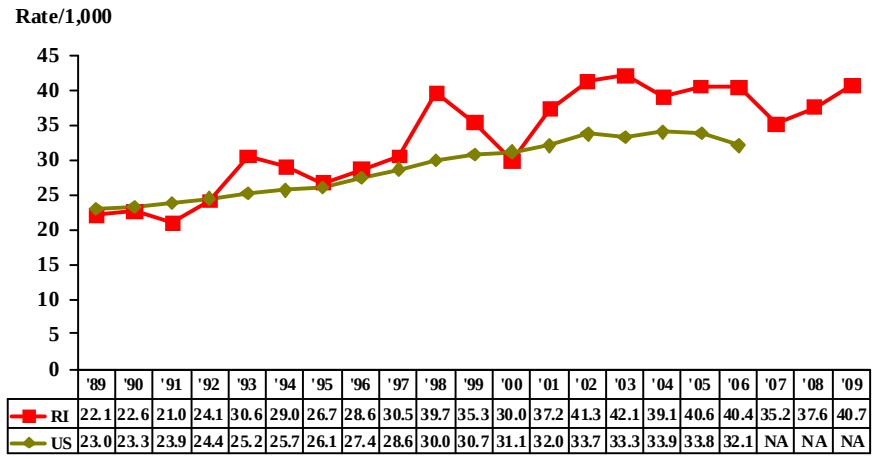
In 1989, Rhode Island passed legislation requiring public and private insurers to provide coverage for medically necessary infertility diagnosis and treatments, including fertility drug therapies, *in vitro* fertilizations, and other assisted reproductive technologies. Since then, Rhode Island has seen changes in its birth outcomes including a dramatic increase in multiple births and an increase in the percentage of babies born at low birthweight.

Between 1989 and 1998, the number of multiple births in Rhode Island rose from 327 births to 500 births, representing a 53% increase. The rate of multiple births increased more sharply from 22.1 per 1,000 live births to 39.7, an increase of 80% (Figure 41). Between 1998 and 2000, the rate decreased by 24.4%, from 39.7 to 30.0. However, since 2000, the multiple birth rate has been rising and reached a high in 2003 of 42.1, a 40.3% increase. Rates of multiple births in Rhode Island have been higher than those for the nation. The largest gap in rates occurred in 1998, when Rhode Island's multiple birth rate was 39.7 compared to the national rate of 30.0.

Between 1989 and 2003, the number of twin babies in Rhode Island increased by 66.3%, from 320 to 532. Triplets and higher order births have also been dramatically rising during this period. In 1989, there were 7 triplet/higher order births, and by 2002 this figure peaked to 59. Provisional data for 2009 indicate there were 453 twin and 12 triplet births.

The overall multiple birth rate (includes twins, triplet, and higher order births) among Rhode Island residents decreased (8.2%) to 35.2 per 1,000 according to 2007 data. However, 2008 and provisional 2009 data indicate another up turn in these rates to 37.6 and 40.7, respectively. Most recent national estimates indicate that the US multiple gestation rate was 32.1 per 1,000 in 2006, while the Rhode Island rate for that year was 40.4 (25.9% higher).

Figure 41



	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
RI	22.1	22.6	21.0	24.1	30.6	29.0	26.7	28.6	30.5	39.7	35.3	30.0	37.2	41.3	42.1	39.1	40.6	40.4	35.2	37.6	40.7
US	23.0	23.3	23.9	24.4	25.2	25.7	26.1	27.4	28.6	30.0	30.7	31.1	32.0	33.7	33.3	33.9	33.8	32.1	NA	NA	NA

Note: Multiple = twin or higher order births; 2009 data are provisional

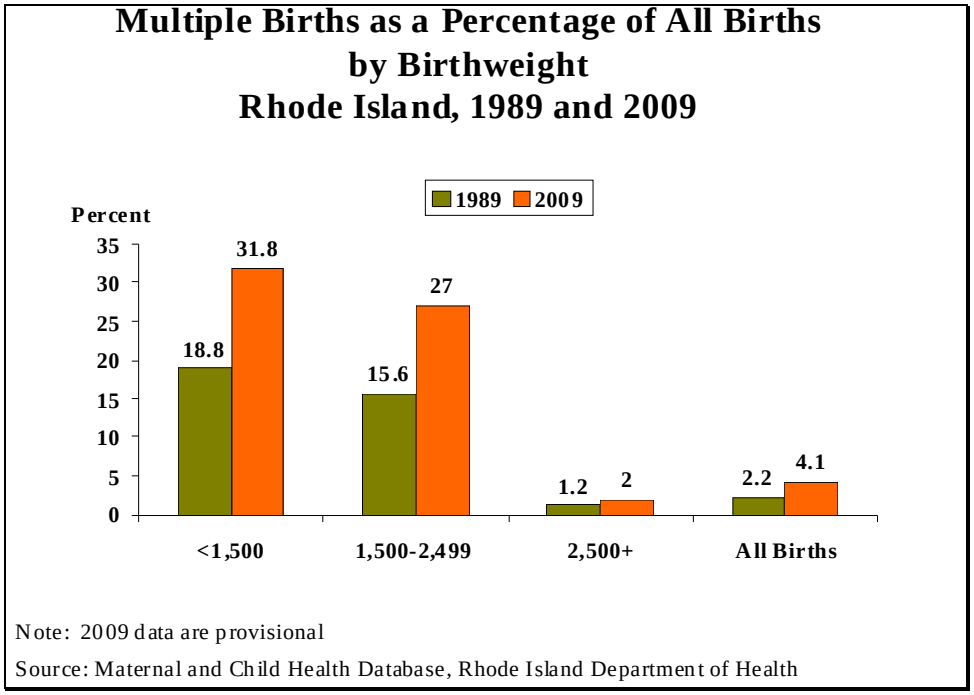
Source: Maternal and Child Health Database, Rhode Island Department of Health

Multiple Births and Low Birthweight

In Rhode Island, between 1989 and 2009, the percentage of all babies born at low birthweights rose from 6.2% to 8.0%. This increase has occurred while other perinatal indicators have been improving, such as a decline in the rates of teen births, maternal tobacco use, and infant mortality. In 1989, 45.3% of multiple births were low birthweight and 10.4% were very low birthweight compared with 41.5% low birthweight and 13.3% very low birthweight in 2009. There was little change in the proportion of singleton births that were low birthweight or very low birthweight. In 1989, 5.7% of singleton births were low birthweight and 1.0% were very low birthweight compared to 4.8% and 1.2%, respectively, in 2009.

In 1989, the 327 multiple births represented 2.2% of the 14,769 total births, 16.3% of low birthweight births (1,500-2,499 grams) and 18.8% of all very low birthweight (less than 1,500 grams) births. Comparatively, in 2009, these figures have doubled or nearly doubled (Figure 42). During 2009, the 465 multiple births represented 4.1% of the 11,416 total births. Of the 465 multiple births in 2009, 193 (41.5%) were low birthweight, which accounted for 27.0% of the 716 low birthweight babies born statewide that year. Almost one out of three (31.8%) of the 195 very low birthweight babies was a multiple birth, while 193 (27.0%) of the 716 babies between 1,500 and 2,499 grams were multiples (Figure 42).

Figure 42



Multiple Births and Prematurity

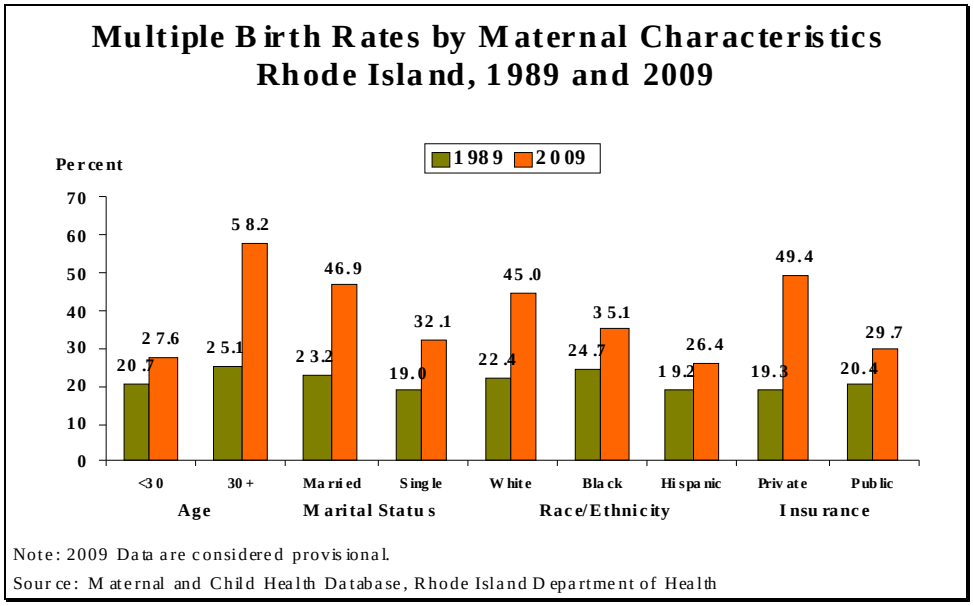
During 1989-2004, the percentage of babies born prematurely (prior to 37 weeks gestation) increased from 5.9% to 10.2%. However, the percentage of multiple births born prematurely more than doubled from 22% to 53.1%. In 1989, multiple births accounted for 8% of all premature births and in 2004, they accounted for 21.0% of all premature births. During 2003, these figures were higher, where 332 (59.7%) of the 556 multiples were born prematurely, and more than one-quarter (25.9%) of the 1,282 premature babies were multiple births. In comparison, 950 (7.5%) of the 12,644 singleton births were premature.

Maternal Characteristics of Multiple Gestation Births

Figures 43 and 44 compare the changes in rates of multiple births between 1989 and 2009 by selected maternal characteristics, including age, marital status, race/ethnicity, and insurance. In twenty years, multiple birth rates more than doubled among women who were aged 30 or older, married, White, and privately insured.

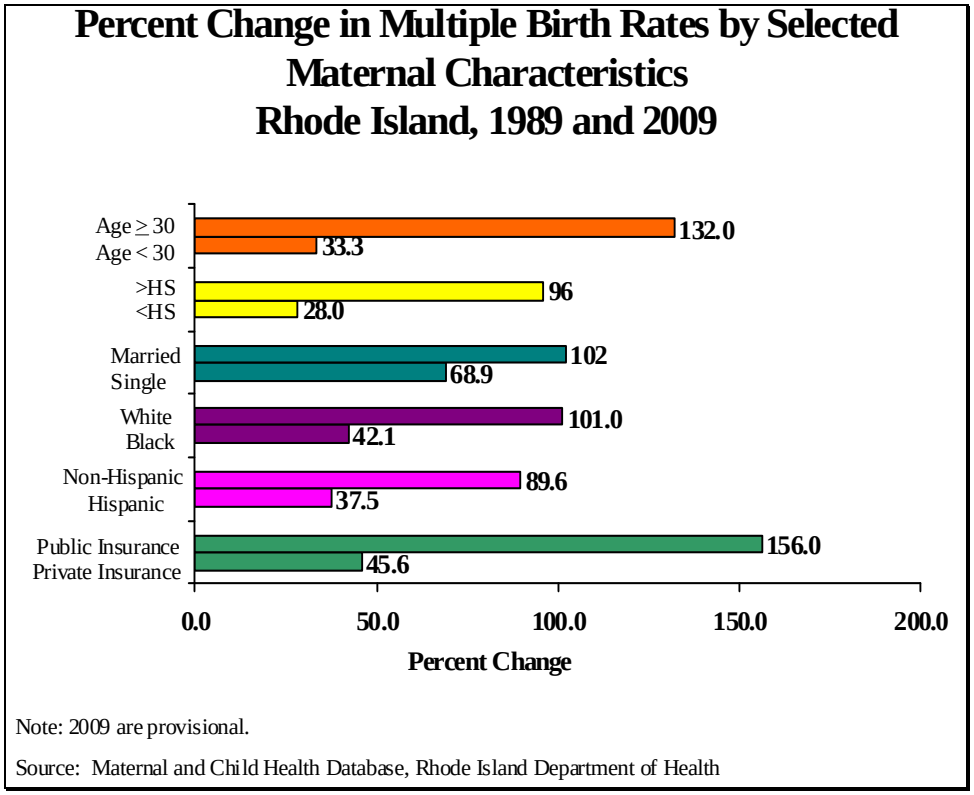
Provisional 2009 data indicate that multiple birth rates were highest among women who were aged 30 or older (58.2), Married (46.9), White (45.0), privately insured (49.4), and those with more than a high school education (44.9).

Figure 43



Between 1989 and 2009, the multiple birth rate among women aged 30 or older increased by 132%, from 25.1 to 58.2. In comparison, the rate increased only slightly (33.3%) among women aged less than 30, from 20.7 in 1989 to 27.6 in 2009 (Figure 43). Although multiple birth rates remain higher among women with an education beyond high school (>12th grade), the multiple birth rate has increased among women with less than or equal to a high school education. During 1989, the multiple birth rate among those with less than a high school education (21.5) was similar to those with more education (22.9). However, by 2009, the rate among those with an education beyond high school had almost doubled to 44.9, representing an increase of 96.0%, whereas the rate among those with less education has decreased from previous years and now represents a 28.0% decline to 15.5. The multiple birth rate among married women also more than doubled between 1989 and 2009, from 23.2 to 46.9, representing a 102% increase. Rates among single women increased less, from 19.0 to 32.1, which is a 68.9% increase. Between 1989 and 2009, rates among Whites doubled, from 22.4 to 45.0, reflecting a 101% increase. Those of Hispanic/Latino ethnicity experienced a modest change in multiple birth rates, increasing by 37.5%, from 19.2 in 1989 to 26.4 in 2009. In comparison, the rate among non-Hispanics rose by 89.6%, from 23.0 to 43.6. Finally, the largest increase in multiple birth rates occurred among those with private insurance. The rate for this group rose by 156%, from 19.3 in 1989 to 49.4 in 2009. The rate among those with public insurance increased by 45.6% from 20.4 to 29.7.

Figure 44



Some of the increase in multiple births can be attributed to an increase in the use of fertility drugs and assisted reproductive technologies. The National Center for Health Statistics reports that about one-third of the increase in triplet births is due to the fact that more older women, who are more likely to have multiple births, are giving birth. About two-thirds of the increase is due to the increasing use of fertility treatments, independent of the mother's age.

According to an article on assisted reproductive technology (ART) published in the CDC's *Morbidity and Mortality Weekly Report* (June 3, 2005, volume 54/no. SS-2), Rhode Island had the fifth highest ratio of the number of ART procedures started per population (million). In fact, Rhode Island's ratio (710.5/million) was nearly twice that for the nation (395.0/million). Of the 45,751 infants born through ART in the country, 53% (24,154) were born in multiple-birth deliveries. The risk for multiple births via ART varies depending on the type of transfer procedure performed, number of embryos transferred, embryo availability, and mother's age. Risks for singleton births were also noted, where "…singleton infants conceived from ART are at increased risk for low birthweight and preterm delivery."

As mentioned previously, questions regarding the use of fertility treatments and procedures have been added to the RI Birth Certificate Worksheet, and implementation began in FY2010.

Breastfeeding

The American Academy of Pediatrics (AAP) identifies breastfeeding as the ideal method of feeding and nurturing infants and recognizes breastfeeding as a critical component in achieving optimal infant and child health, growth, and development. The AAP recommends exclusive breastfeeding for six months after birth, continuous breastfeeding for at least 12 months after birth, and thereafter as long as mutually desired.

Breastfeeding decreases infant mortality and morbidity. Benefits for infants include optimal nutrition, reduced risk for sudden infant death syndrome (SIDS), as well as reduced risk for chronic conditions such as obesity, type 1 and 2 diabetes, and childhood leukemia. Additionally, breastfeeding benefits mothers by creating a strong bond with infants and decreasing risk for postpartum depression, type 2 diabetes, and breast and ovarian cancer. Breastfeeding provides significant social and economic benefits including reduced cost to the family, reduced health care costs, and reduced employee absenteeism (Source: 2010 Rhode Island KIDS COUNT Factbook).

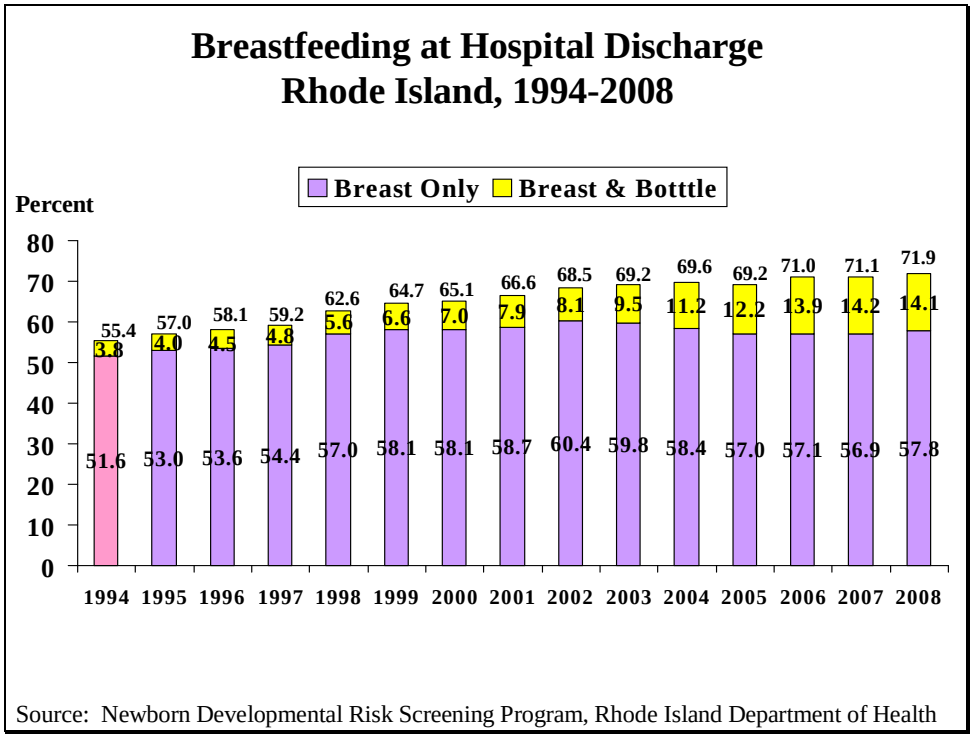
Healthy People 2010, the nation's health agenda, established target breastfeeding rates of 75% at birth, 50% at 6 months, and 25% at one year. Rhode Island exceeded the *Healthy People 2010* goal with 75% of infants born in 2006 having ever been breastfed. Nationally, the percentage of infants who were ever breastfed has significantly increased from 60% among infants born in 1993-1994 to 77% among infants born between 2005-2006, which exceeds the *Healthy People 2010* target.

According to Newborn Developmental Risk Screening (Level I) data, the exclusive breastfeeding rate (at hospital discharge) in Rhode Island has been slowly rising. In 1994, 51.6% of women were, or intended to, breastfeed at hospital discharge, and by 2004, this figure rose to 58.4%. Between 2004 and 2008, more than half (57%) of all women who gave birth in Rhode Island chose to exclusively breastfeed their children, nearly one-third (27%) chose to exclusively formula feed, 13% chose to use a combination of breast and formula feeding, and data on feeding method was not available for 3% of births (Figure 45).

Nationally in 2007, Hispanic children were the most likely to have ever been breastfed, followed by Asian and Native American children. Nationally, non-Hispanic black children are the least likely to have been breastfed, although significant increases in breastfeeding rates have occurred in this group since the mid-1990s.

In 2008, the Rhode Island General Assembly enacted a law that provides mothers with the right to breastfeed in public places. Despite protective laws, mothers and babies who breastfeed in public can still face obstacles and negative reactions from others. Unlike fifteen other states that passed breastfeeding laws, Rhode Island does not have legislation that mandates support for breastfeeding mothers who return to work.

Figure 45

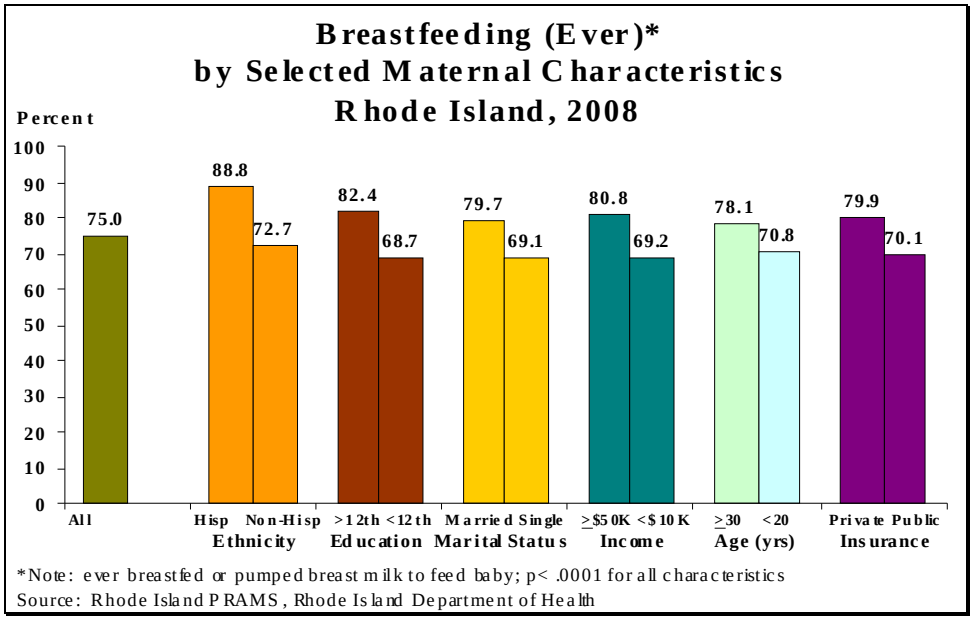


Source: Newborn Developmental Risk Screening Program, Rhode Island Department of Health

Rhode Island is also tracking breastfeeding rates and infant feeding practices with its Pregnancy Risk Assessment Monitoring System (PRAMS), which was implemented in 2002. Weighted data from the PRAMS survey indicate that among respondents who delivered a baby during 2008, 75% had "ever breastfed" their baby after delivery. This figure was up from 2004 when 70.9% of women said they had "ever breastfed."

Figure 46 below shows that women who gave birth in 2008 are more likely to breastfeed if they are of Hispanic/Latino ethnicity, have more than a high school education, are married, have annual household incomes of $50,000 or more, are older, and have private insurance. Women of Hispanic/Latino ethnicity had the highest rate of breastfeeding (88.8%), which was significantly higher than the rate for non-Hispanics (72.7%). Women with an education level greater than high school had higher breastfeeding rates (82.4%) than women with less than a high school education (68.7%). More than three-fourths of married women indicated they breastfed (79.7%) compared with 69.1% of single women. Women with incomes of $50,000 or more (80.8%) were more likely to breastfeed than women with annual household incomes of less than $10,000 (69.2%). Finally, women with private health insurance (79.9%) were more likely to breastfeed than women with public (Medicaid/RIte Care) health insurance (70.1%).

Figure 46



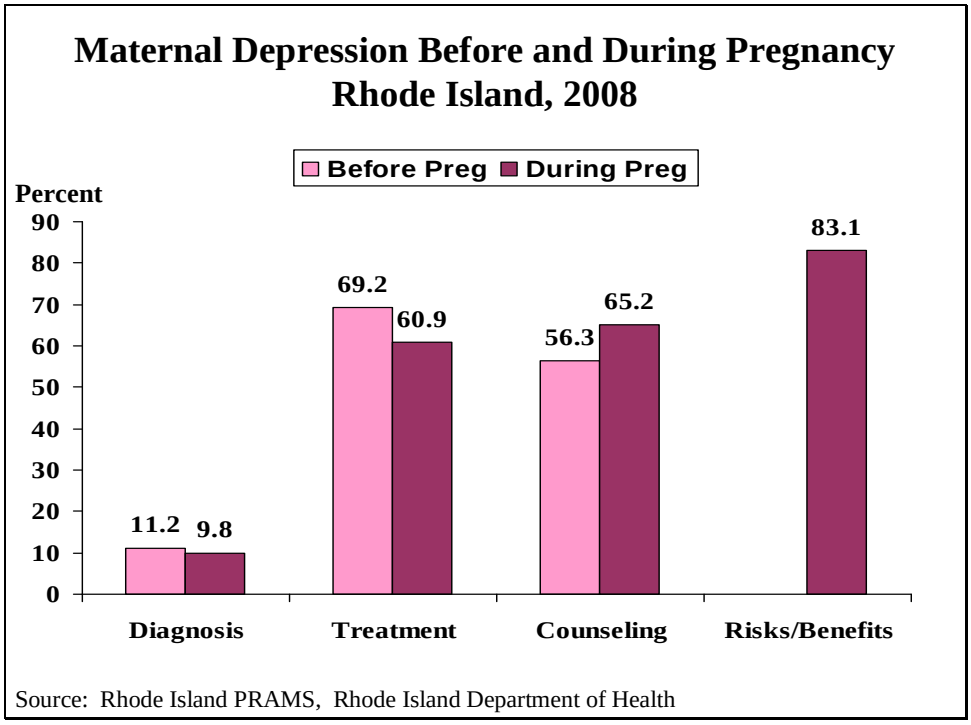
Perinatal Depression

In 2004, a new module of questions regarding perinatal depression was added to the RI PRAMS survey (Phase V). The questions asked if the respondent had been diagnosed with depression before or during pregnancy, and if so, whether they had taken prescription drugs for the depression, had received counseling, and if their health care provider discussed the benefits and risks of taking antidepressants during pregnancy. During 2004 and 2005, 14.8% and 13.7%, respectively, of PRAMS respondents reported they had been diagnosed with depression before or during their pregnancy. Specifically, 11.0% of respondents who gave birth during 2004-2005 reported they had been diagnosed with depression before they became pregnant, and 7.7% reported they were diagnosed with depression during their pregnancy. Approximately two out of three (66.8%) respondents who were diagnosed with depression before their pregnancy were taking prescription medications for their depression before they became pregnant. Just over half (50.8%) of the respondents who were diagnosed with depression during their pregnancy were taking prescription medications during their pregnancy, and nearly three quarters (74.0%) of these women were provided information about the risks and benefits of taking these medications during pregnancy. Approximately half of the respondents indicated they had received counseling for their depression before they became pregnant (49.4%) and during their pregnancy (55.1%).

During 2008, 9.8% of PRAMS respondents reported they had been diagnosed with depression during their pregnancy. This represents a 27% increase from the 2004-2005 rate of 7.7%. More than half (60.9%) of the women who were diagnosed with depression were taking prescription medications for their depression, and more than two-thirds (83.1%) were provided with information about the risks and benefits of taking these medications during pregnancy. Additionally, 65.2% of the women who were diagnosed with depression reported they had received

counseling for their depression. Figure 47 shows the rates of maternal depression before and during pregnancy in Rhode Island in 2008.

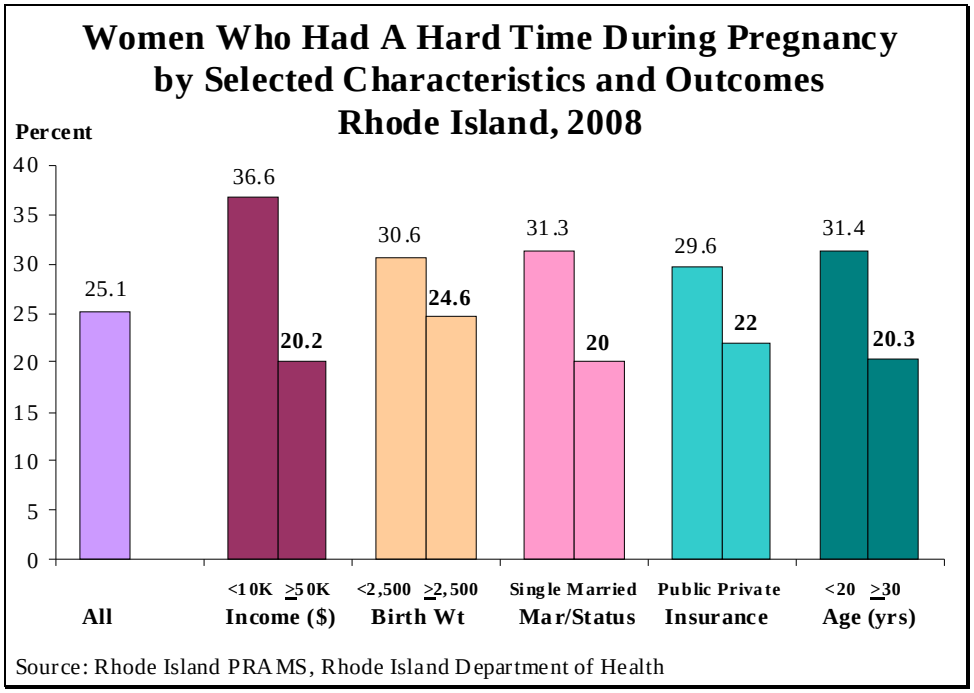
Figure 47



During 2008, according to the Rhode Island PRAMS Survey, approximately one in four women reported they had a hard time during their pregnancy (25.1%). Women who described the time during their pregnancy as hard (moderately hard, very hard, or one of the worst times of their lives) were more likely to have a baby that was low birthweight (less than 2,500 grams). 2008 data indicate that 9.8% of babies born to women who had a hard time during pregnancy were low birthweight compared to 6.5% to women who had a happy time during their pregnancy ($p < .0001$).

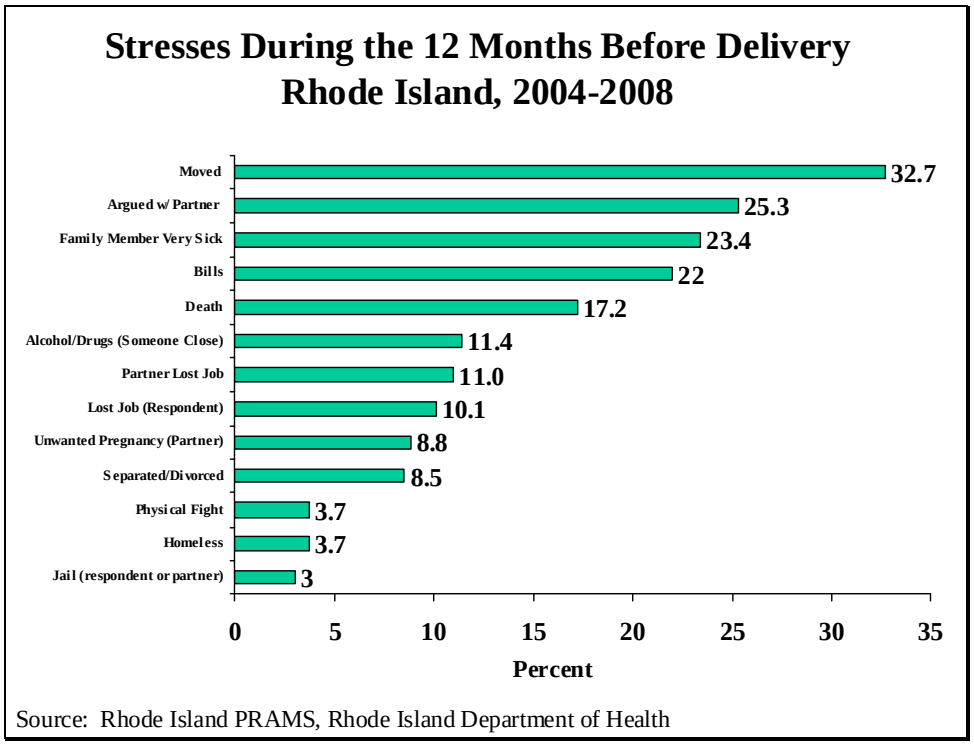
During 2008, the percentage of women who reported having a hard time during pregnancy varied significantly ($p < .0001$) by infant's birthweight, marital status, household income, and health insurance. Figure 48 shows that women who had low birthweight (< 2,500 grams) babies (30.6%) were 1.25 times more likely to have had a hard time during pregnancy compared to women who had normal weight (> 2,500 grams) babies (24.6%). Teenagers were more likely to have had a hard time during pregnancy (31.4%) compared to older women aged $\geq$ 30 (20.3%) ($p < .01$). Single women were more likely to report a hard time during pregnancy (31.3%) than married women (20.0%). Women with annual household incomes of less than $10,000 were almost twice as likely to have had a hard time during pregnancy (36.6%) than women with incomes at or above $50,000 (20.2%). Finally, women with public insurance were more likely to have had a hard time during pregnancy (29.6%) than women with private insurance (22.0%).

Figure 48



Stress during pregnancy can also impact a woman's pregnancy experience and postpartum depression. Rhode Island PRAMS asks about things that happened during the 12 months before their baby was born, such as illness of a family member, separation/divorce from husband/partner, a move to a new address, job loss, fight/argument, bills that couldn't be paid, etc. Figure 49 shows the frequency of the stresses among respondents who gave birth during 2004-2008. The most common stress reported among respondents was moving, where nearly one in three (32.7%) indicated they had moved to a new address during the year before they gave birth. More than one in four respondents indicated they had argued with their partner more than usual (25.3%) or had a close family member become very sick (23.7%). Approximately one in five respondents had a lot of bills they could not pay (22.0%) or they had someone very close who died (17.2%).

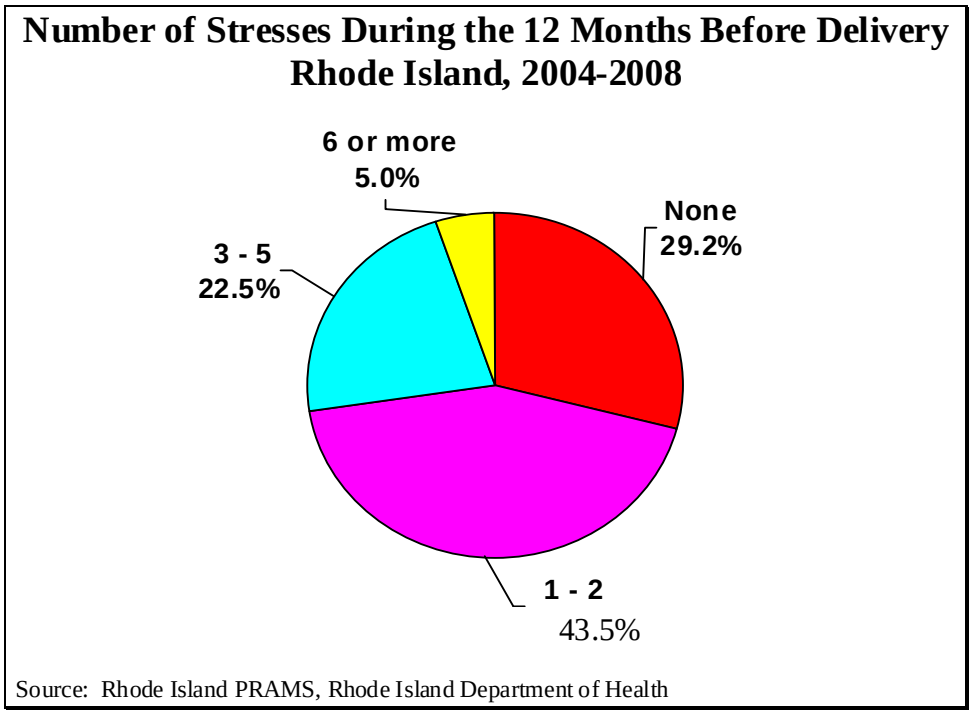
Figure 49



Source: Rhode Island PRAMS, Rhode Island Department of Health

During 2004-2008 many of the respondents had multiple numbers of the 13 stresses asked and described in Figure 49. Although 29.2% of respondents did not have any of the stresses, 43.3% had 1-2, 22.5% had 3-5, and 5.0% had 6 or more (Figure 50). A higher proportion of PRAMS respondents who gave birth during 2004-2008 did not report any stresses (29.2%) compared to 2002-2003 respondents (26.0%). This represents a 12.3% increase between these two aggregations of data.

Figure 50



Women who experienced five or more of the stresses were more likely to have a hard time during their pregnancy (47.7%) than women who did not have any stresses (7.7%). Similarly, 37.9% of women who experienced five or more stresses during the 12 months before their baby was born were depressed after the delivery compared with 8.6% of women who did not have any of the stresses.

3C. CHILDREN

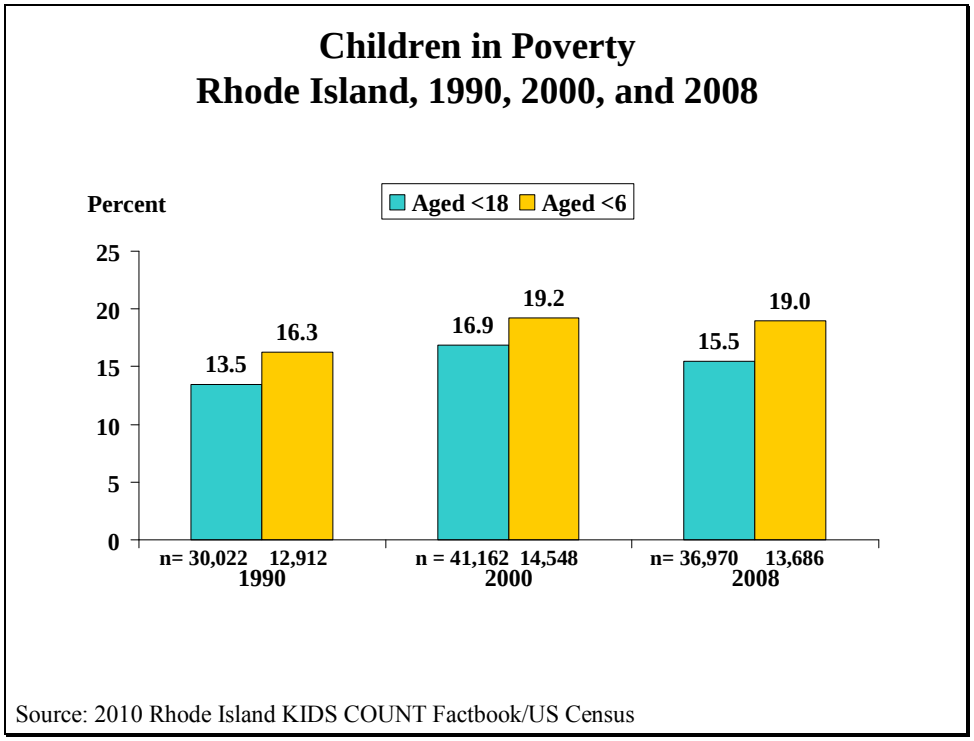
Children in Poverty

The relationship between poverty and health is well established in the literature. From a life course perspective, children in poverty, especially those who experience poverty in early childhood and for extended periods of time, are more likely to have health and behavioral problems, experience difficulty in school, become teen parents, earn less or be unemployed as adults. Children's exposure to risk factors associated with poverty interferes with a child's emotional and intellectual development. Risk factors associated with poverty include: inadequate nutrition, environmental toxins, maternal depression, trauma and abuse, lower quality child care, and parental substance abuse (Source: 2010 Rhode Island KIDS COUNT Factbook).

Between 1990 and 2000, the percentage of Rhode Island children aged less than eighteen living below poverty rose from 13.5% to 16.9%, representing a 25.2% increase. Similar increases occurred among children aged less than six, although higher percentages of children aged less than six live in poverty. During the 1990s, the percentage of children aged less than six living below poverty rose from 16.3% to 19.2%, reflecting a 17.8% increase (Figure 51).

During 2008, the percentage of children under age 18 with known poverty status decreased from 16.9% in 2000 to 15.5%, which is an 8.3% decrease. Rhode Island now ranks fifth (sixth being the worst) among the six New England states and 22nd in the nation according to the 2010 Rhode Island KIDS COUNT Factbook. Among the 36,970 children under age 18 living in poverty in Rhode Island, 14,049 (38.0%) were under age 6. Between 2006 and 2008, 19% (13,686) of Rhode Island children under age six lived below the poverty threshold, which is similar to the national rate of 21%, and almost half (45%) of this age group living in poverty lived in conditions of extreme poverty.

Figure 51

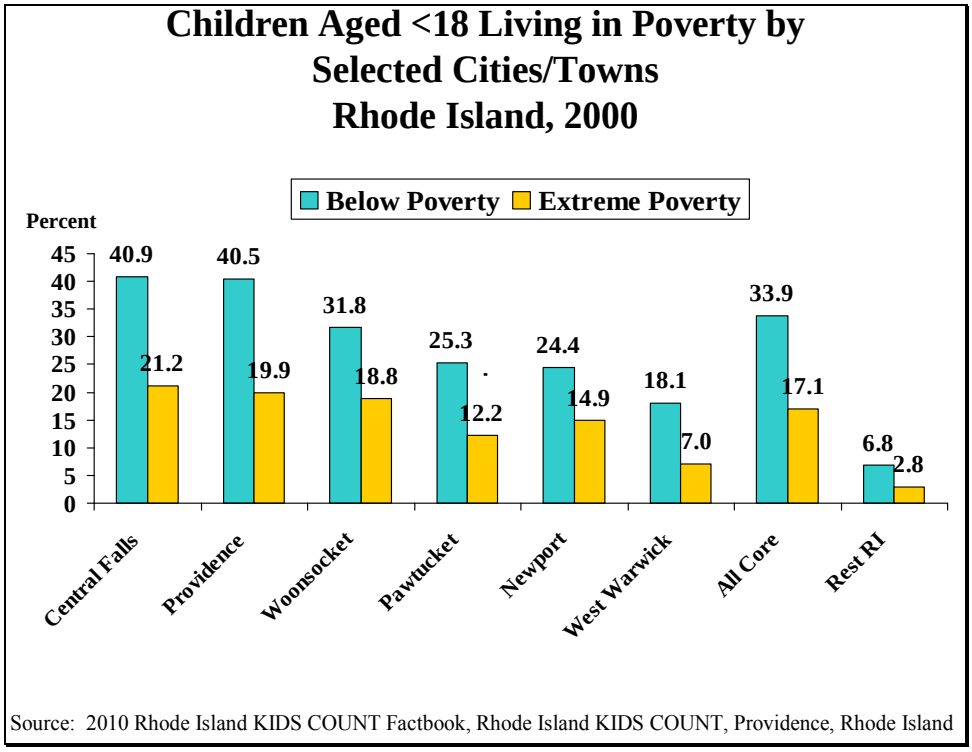


Source: 2010 Rhode Island KIDS COUNT Factbook/US Census

The proportion of children living in poverty varies by race/ethnicity; however, in Rhode Island as well as the nation as a whole, children who are of racial and ethnic minorities are more likely to live in families with incomes below the federal poverty threshold. According to the 2010 Rhode Island KIDS COUNT Factbook, between 2006- 2008 more than one in three Native American (37%), Hispanic (34%), and Black/African American (30%) children lived in poverty compared to 16% of Asian children and 10% of White children. Among the 36,970 Rhode Island children living in poverty, nearly half (48%) were White, 15% were Black, 3% were Asian, 1% were Native American, 27% were of some other race, and 6% were of two or more races.

Six of Rhode Island's 39 cities and towns have 15% or more of children living in poverty. These six cities have been designated as "core cities" by Rhode Island KIDS COUNT and are defined as communities in which 15% or more of the children live in families with income below the federal poverty level. More than one in three (33.9%) children aged less than 18 who reside in the core cities live below poverty, and nearly one in five (17.1%) live in extreme poverty. These figures are higher for children aged less than six who reside in the core cities, where 37.3% live below poverty and 19.5% live in extreme poverty. Figure 52 compares poverty rates among children living in core cities and children living in the rest of the state. Rates also vary among core cities. Central Falls (40.9%) and Providence (40.5%) had the highest rates of children living below poverty.

Figure 52



Children Enrolled in Family Independence and Food Stamps Programs

Rhode Island's Family Independence Program (FIP) provides cash assistance and support to families with low incomes to help them transition from welfare to work. The FIP provides health insurance, subsidized childcare, and food stamps to help families obtain and keep a job. The FIP also provides assistance to children living in families with adults that are unable to work. According to the 2005 Rhode Island KIDS COUNT Factbook, between 1995 and 2004, the number of adults and children enrolled in FIP decreased by 40.6% from 57,477 to 34,148. During 2004, 23,917 children under age eighteen were enrolled in FIP, accounting for 70.0% of all FIP beneficiaries; 75% of these children were aged less than 12. Children living in the core cities represented 78.8% of all children enrolled in FIP and nearly half (48.5%) lived in Providence.

In December 2007, there were 6,242 adults and 17,808 children aged less than 18 enrolled in the Family Independence Program (FIP). Children continued to account for nearly three-quarters (74.0%) of the FIP recipients. The number of FIP cases has been decreasing and between 1996 and 2007, the caseload was cut in half, from 18,428 cases to 9,993 cases. More than three quarters (77%) of the families enrolled in FIP have one or two children. Children living in the core cities were five times more likely to be enrolled in FIP (15%) compared to children living in the rest of the state (3%) (Source: 2008 Rhode Island KIDS COUNT Factbook).

As of July 1, 2008, the Rhode Island Works Program (RI Works) replaced the Family Independence Program as the cash assistance program for children. Between 1996-2009, the Rhode Island cash assistance caseload decreased by 61% from 18,428 to 7,224. In 2009, there were 2,502 child-only cases, 3,130 cases with

adults required to engage in a work activity, and 1,592 cases with adults exempt from a work activity (exemptions include: caring for a disabled spouse or child, in third trimester of pregnancy, and youngest child is under age one).

According to the Rhode Island Department of Human Services, between the State Fiscal Years 1996-2009, state general revenues spending for cash assistance decreased 94% from $58 million to $3.4 million. In the 2009 State Fiscal Year, cash assistance represented less than 1% of Rhode Island's total federal and state budget expenditures of $7.19 billion.

Hunger and lack of regular access to sufficient food are linked to serious physical, psychological, emotional, and academic problems in children and can interfere with their growth and development across the life course. The Supplemental Nutrition Assistance Program (SNAP), formerly the Food Stamp Program, helps low income individuals and families obtain better nutrition through monthly benefits they can use to purchase food at retail stores and some farmers' markets. Children who receive SNAP benefits are 26% less likely to go hungry than eligible children who are not enrolled (Source: 2010 Rhode Island KIDS COUNT Factbook).

According to the 2010 Rhode Island KIDS COUNT Factbook, since 1996 the number of children aged less than 18 participating in the Rhode Island Food Stamp Program decreased by 10.5% from 48,144 in 1996 to 53,220 in 2009. Since 2007, the number of children receiving assistance increased by 32% from 40,224 in 2007 to 53,220 in 2009. Between October 1, 2005 and October 1, 2009, participation rates among children increased by more than one-third (36%) in the core cities and more than doubled (110%) in the remainder of the state.

Children's Health Insurance

Children's health insurance status is a major determinant in whether children have access to care. Children who lack insurance coverage are more likely to have no usual place of care, delayed care, unmet medical and dental needs, and fewer visits to the doctor and dentist.

Rhode Island's Medicaid managed care health insurance program, RIte Care/RIte Share, is available to children and families based on income. RIte Share provides benefits, such as co-pays for doctor visits and prescriptions, to eligible families who have access to insurance through their employers in order to facilitate their participation. As of December 31, 2009, 71% (78,953) of RIte Care members who qualified based on income were children under age 19. There were 41,223 low income parents enrolled in RIte Care as of December 31, 2009. RIte Care enrollment rose from 104,636 in December 2008 to 111,646 in December 2009, but it remains below the peak of 120,049 in December 2004 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Between 2006 and 2008, 7.0% of Rhode Island's children under age 18 were uninsured compared to 10.8% of children in the U.S. Rhode Island ranks 14th best in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents' employers. Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from 73.3% between 1999 and 2001 (an 8% decline). Also during this time period, approximately 72% (13,078) of the estimated 18,141

uninsured children in Rhode Island were eligible for RIte Care based on their family incomes but were not enrolled (Source: 2009 Rhode Island KIDS COUNT Factbook).

Child Well-Being and Health Status

According to the 2009 edition of the Kids Count Data Book published by the Annie E. Casey Foundation (www.kidscount.org), Rhode Island's ranking for child well-being has improved from 21st to 15th in the country (1st being the best). Compared to the rest of the New England states, Rhode Island's ranking is the lowest. Vermont and Maine also improved in rank, moving from 10th to 8th and 16th to 12th, respectively. New Hampshire and Connecticut maintained their respective rankings of 1st and 4th, while Massachusetts was the only New England state to fall in the ranking from 3rd to 5th. Table 3 reflects the changes in overall rankings of New England states for child well-being in 2008 and 2009.

Table 3: Overall Rankings of New England States for Child Well-Being

State	2008 Ranking	2009 Ranking
New Hampshire	1	1
Vermont	10	8
Connecticut	4	4
Massachusetts	3	5
Maine	16	12
Rhode Island	21	15

Child Care

Infant and Preschool Child Care

The availability of high quality child care enables parents to work and supports the development of important skills in preparation for entry into the educational system. High-quality child care and early learning programs for infants, toddlers, and preschoolers have long-lasting positive effects on how children learn, develop, cope with stress, and handle their emotions.

Child care has become a fundamental need for Rhode Island families over the past two decades. In 1997, legislation was passed to help families transition from welfare to employment. The legislation known as "Starting Right" was created to improve access for low income families to affordable and quality child care in Rhode Island. The implementation of Starting Right has led to significant growth in the availability of regulated child care. According to the US Census, between 2006 and 2008, an estimated 68% of Rhode Island children under age six had all parents in the workforce, higher than the U.S. estimated rate of 63%. National data indicate that, on average, preschoolers with an employed mother spend 28 hours per week in non-parental care, compared to 18 hours per week for children with mothers not in the workforce (Source: 2010 Rhode Island KIDS COUNT Factbook).

In Rhode Island, over the past ten years, the availability of licensed and certified (regulated) child care for children under age six increased by 8.5% from 20,383 slots in 1999 to 22,283 slots in 2009. This was down from a

peak high of 26,243 in 2006. Since 1999, the number of licensed child care center slots for infants and toddlers (children under age three) in Rhode Island has increased fairly steadily, growing 35%, from 4,164 to 5,605 in 2009 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Estimates show that in Rhode Island during 2009, 22,283 children under age six were in need of regulated child care, and there were 25,885 regulated child care slots. In other words, there were 86 slots for every 100 children in need of regulated child care. The supply of regulated child care varies by community, and core cities had 100 slots per 100 children in need compared to the remainder of the State where 79 slots are available for every 100 children in need (Source: 2010 Rhode Island KIDS COUNT Factbook).

The number of licensed child care center slots for preschoolers (children ages three to five) has grown more slowly than slots for infants and toddlers since 1999. Between 1999 and 2009, there has been a 10% increase in the number of licensed slots for preschoolers. The number of licensed family child care slots grew 62% between 1999 and 2006. Since 2006, the number of family child care slots has decreased; the 2009 level is 12% below the capacity in 1999 (Source: 2010 Rhode Island KIDS COUNT Factbook).

The percentage of nationally accredited child care centers, private preschools, and family child care homes is an indicator of quality child care. The National Association for the Education of Young Children (NAEYC) and the National Association for Family Child Care (NAFCC) accredit child care centers and family child care homes, respectively. NAYEC and NAFCC accreditations are often used as a marker for a higher level of quality in states that have quality rating systems. In Rhode Island, in January 2010, 16% of child care centers and preschools in the core cities were NAEYC accredited, compared to 6% in the remainder of the state (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2009, researchers collected data from a random sample of child care centers and preschools in Rhode Island to inform the development of BrightStars, Rhode Island's Quality Rating and Improvement System (QRIS). BrightStars, Rhode Island's new statewide QRIS for child care and early learning programs, was launched in 2009 with voluntary participation (Source: 2010 Rhode Island KIDS COUNT Factbook).

Using valid and reliable classroom observation tools, researchers found that most early childhood center-based classrooms (74% of infant/toddler classrooms and 86% of preschool classrooms) were providing a "medium" level of quality characterized by a fundamentally safe environment with access to good quality materials, but activities and interactions could be more enriching and purposeful to support child development and learning. There were some classrooms for both age groups that provided high-quality care. Low-quality care was more common for infants and toddlers than for preschoolers (Source: 2010 Rhode Island KIDS COUNT Factbook).

Children Enrolled in Head Start

Early Head Start was established in 1994 as a comprehensive early childhood program serving low income children birth to age three, pregnant women, and their families. Priority enrollment is given to children in families with incomes below the federal poverty line. Funded almost entirely by the federal government, Early Head Start is designed to provide high-quality early care and education and comprehensive services to infants and toddlers, to

promote healthy birth outcomes for pregnant women, and to foster the development of healthy family relationships (Source: 2010 Rhode Island KIDS COUNT Factbook).

The *National Evaluation of Early Head Start* showed that the program produced significant cognitive and language development gains in participating children and more positive interaction with their parents. Early Head Start parents provided more emotional support and greater opportunities for language and learning to their children than a comparable group of parents not participating in Early Head Start. Early Head Start mothers also have fewer subsequent births within two years of enrollment and are more likely to participate in education and job-training activities (Source: 2010 Rhode Island KIDS COUNT Factbook).

By October 2008, 2,484 (40%) of the estimated 6,200 eligible children received Head Start services. Only 34% of eligible children in core cities received Head Start services compared with 58% for the rest of the state. Decreased state funding for Head Start eliminated 244 of the 400 state-funded Head Start slots for the 2008-09 school year. The Comprehensive Child Care Services Program was also eliminated, where estimates show that 300 Head Start eligible children would lose educational and social services (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2009 in Rhode Island, federal funding for Early Head Start enabled services to be provided to 376 children, representing approximately 4% of the 9,365 income-eligible children ages birth to three and their families. Three-quarters of the child population that are income-eligible for Early Head Start reside in the core cities of Rhode Island, yet only 3% of these eligible children have access. In 2009, there were 212 children enrolled in Early Head Start from the core cities of Central Falls, Newport, Providence, and West Warwick and 164 children from the remainder of the state. There were no Early Head Start services available to children in the core cities of Pawtucket and Woonsocket. Beginning in 2010, federal stimulus funding to expand Early Head Start services in Rhode Island will bring services to approximately 134 children in Pawtucket, Providence, and the Johnston/North Providence/Smithfield area (Source: 2010 Rhode Island KIDS COUNT Factbook).

Accredited Early Care and Education

Early childhood programs that have achieved national accreditation have met standards that exceed minimum state licensing requirements. Between 2007 and 2009, the number of nationally accredited child care centers and preschools in Rhode Island fell from 53 to 37 sites. More stringent accreditation criteria and increased fees that were implemented in 2006 may have contributed to the decline. In addition, Rhode Island also reduced child care subsidy funding (Source: 2010 Rhode Island KIDS COUNT Factbook).

School-Age Child Care

According to the 2010 Rhode Island KIDS COUNT Factbook, enrollment in full-day kindergarten has been increasing steadily over the past 25 years in the U.S. In 1979, 25% of kindergartners were in full-day programs. In 2008, 72% of the nation's public school kindergarteners and 72% of private school kindergarteners were enrolled in full-day programs.

In Rhode Island in the 2009-2010 school year, 60% of the children who attended public kindergarten were in a full-day program. Additionally, 16 school districts offered universal access to full-day kindergarten programs,

and another eight school districts operated at least one full-day kindergarten classroom. All of the independent charter schools in Rhode Island that offer kindergarten run full-day programs (Source: 2010 Rhode Island KIDS COUNT Factbook).

Child care subsidies are provided by the Department of Human Services and can be used for after-school programs for children up through age 16. Between 2006 and 2009, the number of child care subsidies for school-age children has dropped 45% from 5,218 to 2,868. In September 2007, 1,463 children were removed from the Child Care Subsidy Program due to a decrease in income eligibility from 225% of the federal poverty level to 180%. In addition, the subsidy rates paid to before and after-school providers decreased (Source: 2010 Rhode Island KIDS COUNT Factbook).

In December 2009, 2,868 Rhode Island children ages six to 12 received a child care subsidy for before and/or after-school care. Of these children, 1,918 (67%) were enrolled in a licensed center-based program, 918 (32%) were enrolled in licensed family child care, and 32 (1%) were in the care of a license-exempt family, friend, or neighbor (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2009 in Rhode Island, there were 10,821 licensed school-age child care slots in 204 center-based programs in Rhode Island. Five of these programs were accredited by the National After School Association. After reaching a peak of 14,236 in 2003, the number of licensed center-based slots for school-age children has been steadily decreasing. Licensed school-age child care capacity is now 24% below the high point (Source: 2010 Rhode Island KIDS COUNT Factbook).

Child Care Choices

According to the 2007 National Survey of Children's Health, Rhode Island children regularly receive 10+ hours of child care in the following types of settings: child care center (73.7%); family-based child care outside the home (51.6%); and, child care in their home provided by a nanny or relative (39.3%). Approximately one out of eight respondents (13.2%) indicated that they or someone in their family had to quit a job, not take a job, or greatly change their job because of problems with child care.

After School Supervision

Between 2006 and 2008, an estimated 74% of Rhode Island children ages six to 17 had all resident parents in the workforce, higher than the U.S. average of 71%. Children are typically in school for only about 64% of the time that full-time employed parents are at work. The gap between parents' work schedules and students' school schedules amounts to 15-25 hours per week during the school year. In Rhode Island, 21% of elementary school students and 37% of middle school students reported that they are unsupervised after school on three or more days a week (Source: 2010 Rhode Island KIDS COUNT Factbook).

Medical Home

Compared to the nation, more children in Rhode Island have a medical home. According to the 2007 National Survey of Children's Health, 63.6% of Rhode Island children have a medical home, in contrast to the national rate of children with a medical home at 57.5%. *These data reflect an increase from the 2003 survey when 60.4% of Rhode Island children had a medical home, in contrast to 46.1% of children nationally had a medical home*. More Rhode Island children also had a preventive medical visit in the past year (97.7%) than did children nationally (88.5%). The vast majority of respondents (94.9%) stated their children had received all the medical care they needed during the past year. 96.0% of respondents have someone they think of as their child's personal doctor or nurse while 4.0% did not. The majority of respondents (83.3%) indicated their child's personal doctor or nurse always or usually spends enough time with their child. More than one in four (25.7%) respondents stated their child needed to see a specialist. However, only six percent of those who needed a specialist reported that they had difficulty receiving it. Relatively few respondents (5.2%) stated they needed an interpreter to help speak to their child's doctors/nurses.

Other Sources for Medical Home Assessment

It should be noted that a set of medical home indicators has been developed by the Division Community, Family Health and Equity's Medical Home Work Group. Indicators were developed for each of the seven components of medical home as defined by the American Academy of Pediatrics: accessible, family-centered, continuous, comprehensive, compassionate, culturally effective, and coordinated and were prioritized by their communication power, measurability and meaningfulness to the medical home definition. Available data sources such as KIDSNET, National Survey of CSHCN, Early Intervention Program, PRAMS, and satisfaction surveys were considered. Input is currently being obtained from providers, community organizations, families, and other medical home projects/initiatives in the state.

Childhood Immunizations

Immunizations

Rhode Island purchases vaccines for all children and distributes them to health care providers. In order to ensure that vaccines reach all children, the Rhode Island Department of Health works in partnership with Rhode Island health care providers to maintain and share KIDSNET immunization data for children from birth to age 18. In accordance with national recommendations, Rhode Island requires vaccination against the following diseases prior to entry into child care, preschool, Head Start or kindergarten: diphtheria, tetanus, and pertussis (DTaP); hepatitis B; Haemophilus influenzae type b (Hib); measles, mumps, rubella (MMR); polio (IPV); varicella (chickenpox) and pneumococcal disease.

According to the United States Centers for Disease Control National Immunization Survey (NIS), between July 1, 2007 - June 30, 2008, 78.7% of Rhode Island children were vaccinated for the 4:3:1:3:3:1 series, representing a decrease from the previous year when 79.6% of children were vaccinated. Although Rhode Island's rates are

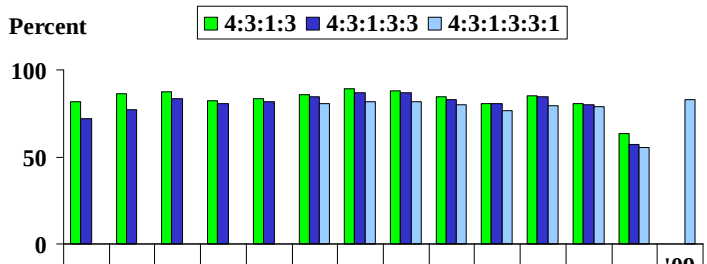
higher than those of the nation, the decrease in coverage rates remains a concern. The fall in coverage is mainly attributed to the 4+DtaP, which dropped significantly from 94.7% in 2004 to 84.9% in 2007.

Rhode Island ranks 15th in the nation for the completion of the full Series in 2008, an improvement from 38th in 2007. Rhode Island's rate of fully immunized children ages 19 months to 35 months (77.5%) was higher than the national average (76.1%) in 2008. In 2008, there were 179 Rhode Island children who were exempt from receiving one or more vaccines for medical, religious, or personal reasons.

In 2009, vaccination rates among Rhode Island children 19-35 months show a precipitous drop. For the 4:3:1:3:3:1 series, there was a 29.5% decline from the previous year from 78.7% in 2008 to 55.5% in 2009. This can be explained by a shortage of the Haemophilus influenzae (Hib) vaccine. The CDC NIS estimates that about one-third of children in the 2008-2009 data were affected by the Hib shortage. Figure 53 includes the most current NIS data and calculates the immunization rates excluding the Hib vaccine to account for this shortage.

Figure 53

Child* Immunization Rates
Rhode Island, 1997-2009**



	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'09 ***
4:3:1:3	82	86	87	82	84	86	89	88	84	81	85	81	64	-
4:3:1:3:3	72	77	83	81	82	85	87.0	86.7	83	80	84	80	57	-
4:3:1:3:3:1	NA	NA	NA	NA	NA	81	82	82	80	76	80	79	56	83

Notes: * Children aged 19-35 months; **2006-2009 data represent Quarter 3-Quarter 2 (July 1--June 30);
*** 4:3:1:3:3:1 series excluding Hib due shortage which began in Dec. 2009. Shortage impacts all 3 series.
Source: National Immunization Survey

Disparities in Immunization Rates

Vaccination rates vary by race/ethnicity, poverty status, and WIC Program participation. Data from the 2005-2006 National Immunization Survey indicate that children living below poverty (75.8%) were less likely to have completed the 4:3:1:3:3:1 series than children living above the poverty level (84.7%). Children were more likely to be immunized if their mother's education level was above high school (85.8%) compared to children of women who had less than 12 years of education (68.1%). Rates among non-Hispanic children (82.4%) were higher than rates among those of Hispanic/Latino ethnicity (73.6%). Data from the 2007-2008 National Immunization Survey indicate the trends described above continue.

In the U.S. in 2008, the 4:3:1:3:3:1 vaccination rate among children ages 19 months to 35 months was 82% for Asian children, 78% for Hispanic children, 77% for Native American children, 75% for White children, and 73% for Black children. Poverty remains a risk factor for under-immunization. In the U.S. in 2008, children living at or above the federal poverty level had a 78% immunization rate, while children living below the poverty level had a 72% immunization rate.

Immunization Rates among Kindergarteners and Children in Middle School

The 2008-2009 Rhode Island School Immunization Assessment (comprised of data collected directly from student health records) included an analysis of 2,751 randomly selected records from students at kindergarten entry (5-7 years of age) and at middle school entry (11-13 years of age) across 132 randomly selected public and private schools. Immunization levels in Rhode Island for children entering kindergarten are also excellent. Over 94% of entering kindergarteners were up-to-date on the five immunizations needed for school entry. More than 94% of entering middle school students had three of the four recommended immunizations (Source: Rhode Island Department of Health Immunization Program Data).

Immunization Rates among High School Students

State-level data for immunizations among adolescents ages 13 to 17 are available for the first time through the National Immunization Survey - Teen. In 2008, Rhode Island adolescents ranked best in the U.S. for four immunizations (3+HepB, 1+Varicella [chickenpox], 1+MCV4, and 1+HPV4), 2nd best for two immunizations (2+MMR and 1+Td/Tdap), and 27th for 1+Tdap. In 2008, more than 95% of Rhode Island adolescents had received the 2+MMR, the 3+HepB, and the 1+Varicella vaccines, compared with rates below 90% in the U.S. as a whole. (Source: Rhode Island Department of Health Immunization Program Data).

To ensure that all high school seniors are fully vaccinated before beginning college or work, the Rhode Island Immunization Program runs Vaccinate Before You Graduate (VBYG) in high schools throughout the state. The program informs parents and students of the importance of immunization and holds vaccination clinics throughout the year at each participating school. The immunizations are funded by the state's Vaccines for Children program and are offered at no cost to students. During the 2008-2009 school year, 72 schools participated in VBYG. Of the 1,676 students enrolled in the program, 98% received one or more immunizations, and 86% completed all immunizations for which they were enrolled. The vaccines administered included Hepatitis B, MMR, TdaP, meningococcal (MCV4), varicella (chicken pox), polio, influenza, and the human papillomavirus vaccine (HPV) (Source: Rhode Island Department of Health Immunization Program Data).

H1N1 Flu Vaccination

According to the Centers for Disease Control (CDC) data, Rhode Island had the highest estimated influenza A (H1N1) monovalent vaccination coverage (84.7%) in 2009 for children from 6 months of age to 17 years of age. Nationally, the percentage of children vaccinated was significantly lower (36.8%) and regionally, in New England the average was 56.5%.

Addressing Social and Environmental Determinants of Health for ALL MCH Populations –

Healthy Housing

Designing and implementing programs that address the social and environmental determinants of health can be challenging, but it is critically important to facilitating healthy development and sustained health across the life course. The *Healthy Homes and Environment Team*, one of six teams representing the priority areas of the CFHE, is working hard to protect the health and safety of children by identifying and decreasing environmental hazards that often lead to deleterious health outcomes. By developing and implementing Rhode Island's "Healthy Housing Initiative," CFHE is actively working to address some of the important social and environmental determinants of health often present in disadvantaged communities.

Two recent events have made a big difference in the world of healthy communities. In June 2009, the United States Surgeon General issued the *Call to Action to Promote Healthy Homes* (www.surgeongeneral.gov/topics/healthyhomes) describing steps that people can take to protect themselves from disease, disability, and injury that may result from health hazards in their houses. Most recently, in early 2010, the Surgeon General issued a publication with her *Vision for a Healthy and Fit Nation* (www.surgeongeneral.gov/library/obesityvision) inviting the nation to create neighborhood communities that are focused on healthy nutrition and regular physical activity, where the healthiest choices are accessible for all citizens.

In the last few years, the federal government has made significant efforts to provide funding and identify policies that support housing that promotes positive health outcomes. Much has been done during this time to better understand the concepts and steps to make a home "healthy". The National Center for Healthy Housing has developed seven key principles of healthy housing. According to these principles, a healthy home is one that is:

- *Dry:* Damp houses provide a welcoming environment for mites, roaches, rodents, and molds, all of which are associated with asthma.
- *Clean:* Clean homes reduce children's exposure to contaminants and are less likely to harbor household pests.
- *Pest-Free:* Mice and cockroaches can trigger asthma in some children. The pesticides used to rid homes of household pests can also exacerbate health problems.
- *Safe:* A majority of injuries to children occur in the home. Falls are the most frequent cause of residential injuries to children, followed by injuries from objects in the home, burns, and poisonings.
- *Contaminant-Free:* Many contaminants found in the home pose risks to children's health. These contaminants can include lead, radon, asbestos, pesticides, carbon monoxide, volatile organic compounds, and second-hand tobacco smoke.
- *Ventilated:* Research shows that having a well-ventilated home improves respiratory health.
- *Maintained:* Homes that are poorly maintained may have excessive moisture, pest problems, or deteriorating lead paint, all of which pose health risks to children.

The concepts of healthy housing and a fit nation complement each other. The Surgeon General's publications make a compelling case for this connection and invite individuals, families, property owners, maintenance workers, community and faith-based organizations, healthcare providers, home visiting agencies,

lenders, developers, home builders, inspectors, educators, academic and research organizations, scientists, and the government to play a role in promoting these goals.

At the Rhode Island Department of Health, the movement toward a more comprehensive approach to addressing the range of housing problems that influence health had its start in the Childhood Lead Poisoning Prevention Program. Advocates for lead poisoning prevention had long recognized that families with lead poisoned children face problems that extended far beyond lead. Client families were often overwhelmed by poverty, isolation, safety, and housing code issues that ranged from pests to unsafe furnaces. State and municipal programs that were initiated to finance lead abatement quickly found that leaking roofs and other housing problems had to be addressed before lead abatement could begin. The need to switch from a less categorical to a more comprehensive approach to housing problems was also recognized by federal agencies that funded state and local lead poisoning prevention activities.

Rhode Island's surveillance of lead screening levels provides the quantitative data needed to clearly define the lead poisoning problem and evaluate the effectiveness of programs designed for lead poisoning prevention. In contrast, no such database exists to evaluate the nature of healthy housing in Rhode Island. As the introduction to this booklet illustrates, simply defining Healthy Housing is challenging. The measures used to define Healthy Housing—dry, clean, pest-free, safe, contaminant-free, ventilated, and maintained—are subjective, so data collection is difficult.

Developing quantitative measures is a key step toward improving the status of healthy housing. Indicators derived from available data were needed as surrogates for the seven steps to healthy housing. Many of the same advocates who helped form the Healthy Housing Collaborative were involved in developing two key indicators of healthy housing. These two indicators are the percentage of children living in older housing (built before 1980) and the percentage of low-income children (less that 200% of the federal poverty level) living in older housing. These data are from the 2006-2008 American Community Surveys (three-year average).

Based on this survey, children in low-income families living in Rhode Island and across the nation are more likely to live in older housing than other children. From 2006 to 2008, 86% of low income children in Rhode Island lived in older housing compared to 74% of all children. Rhode Island has the highest percentage of low-income children in the nation living in older housing.

These indicators provide a useful surrogate to measure healthy housing only to the extent that the age of housing relates to unhealthy housing conditions. Obviously, many older, well-maintained homes are desirable, safe, and healthy places to live, while some poorly constructed and poorly maintained newer homes are less healthy. However, the older the home, the more likely that lead, asbestos, and other hazards may be present. These indicators can be improved by having address-specific data on housing conditions. Computerized records of housing code violations and case management reports may provide future sources of data.

In addition to age of housing and percentage of children living in poverty, lead poisoning rates also provide an indicator of the status of housing. Figures 54, 55, and 56 illustrate these three indicators by census tract statewide. Combining these three measures into a single healthy housing indicator may provide a better assessment of the overall status of the housing for a census tract or community (Figure 57).

These maps only suggest areas of unhealthy housing. Address-specific data on pests, mold, asthma, furnace maintenance, smoke-free leases, and other indicators of healthy housing would enhance the overall indicator. The limitations of the indicators shown in the chart and maps included in this section do not obscure the nature of the healthy housing challenge in Rhode Island—the state houses too many of its children in old houses within neighborhoods affected by poverty.

Figure 54

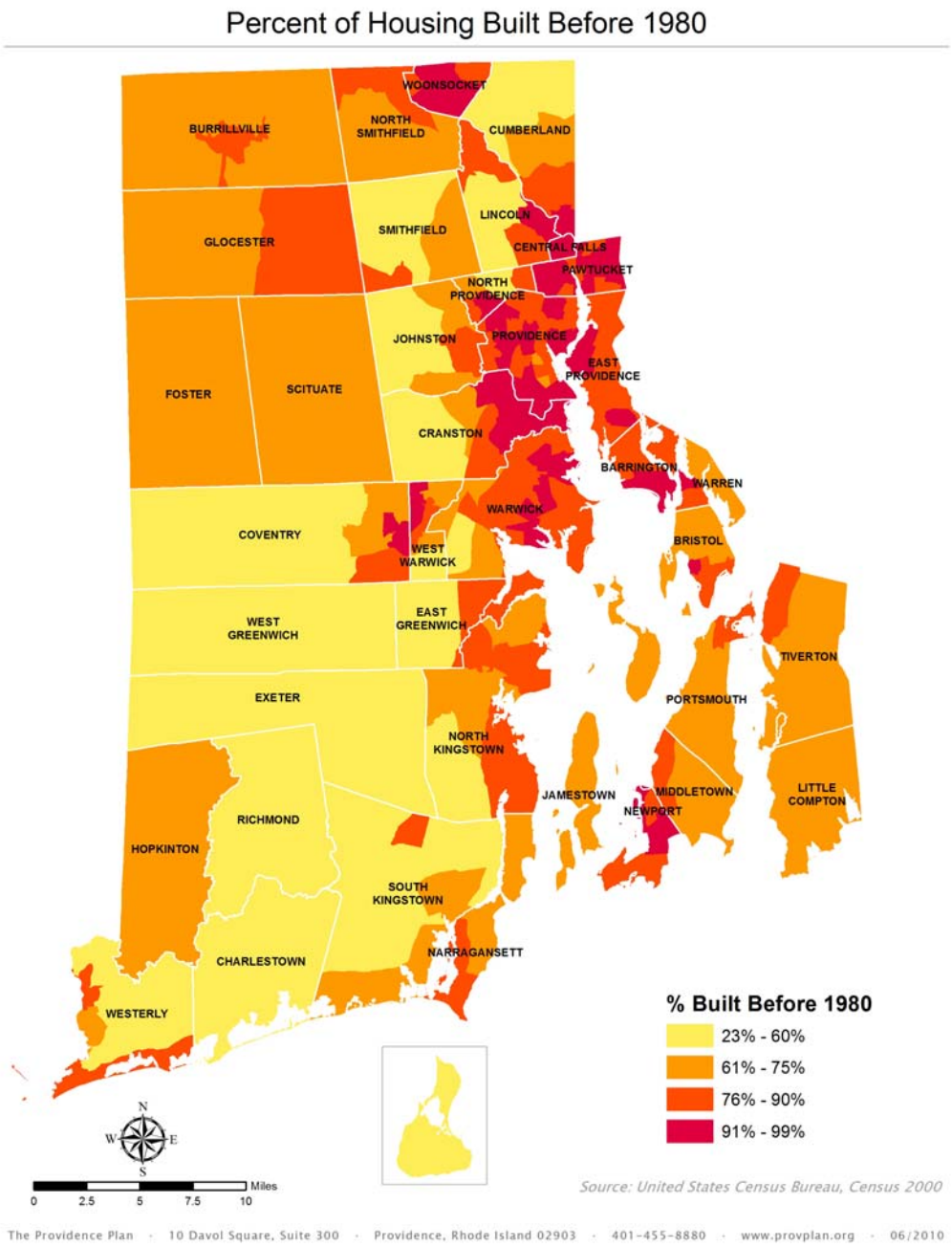


Figure 55

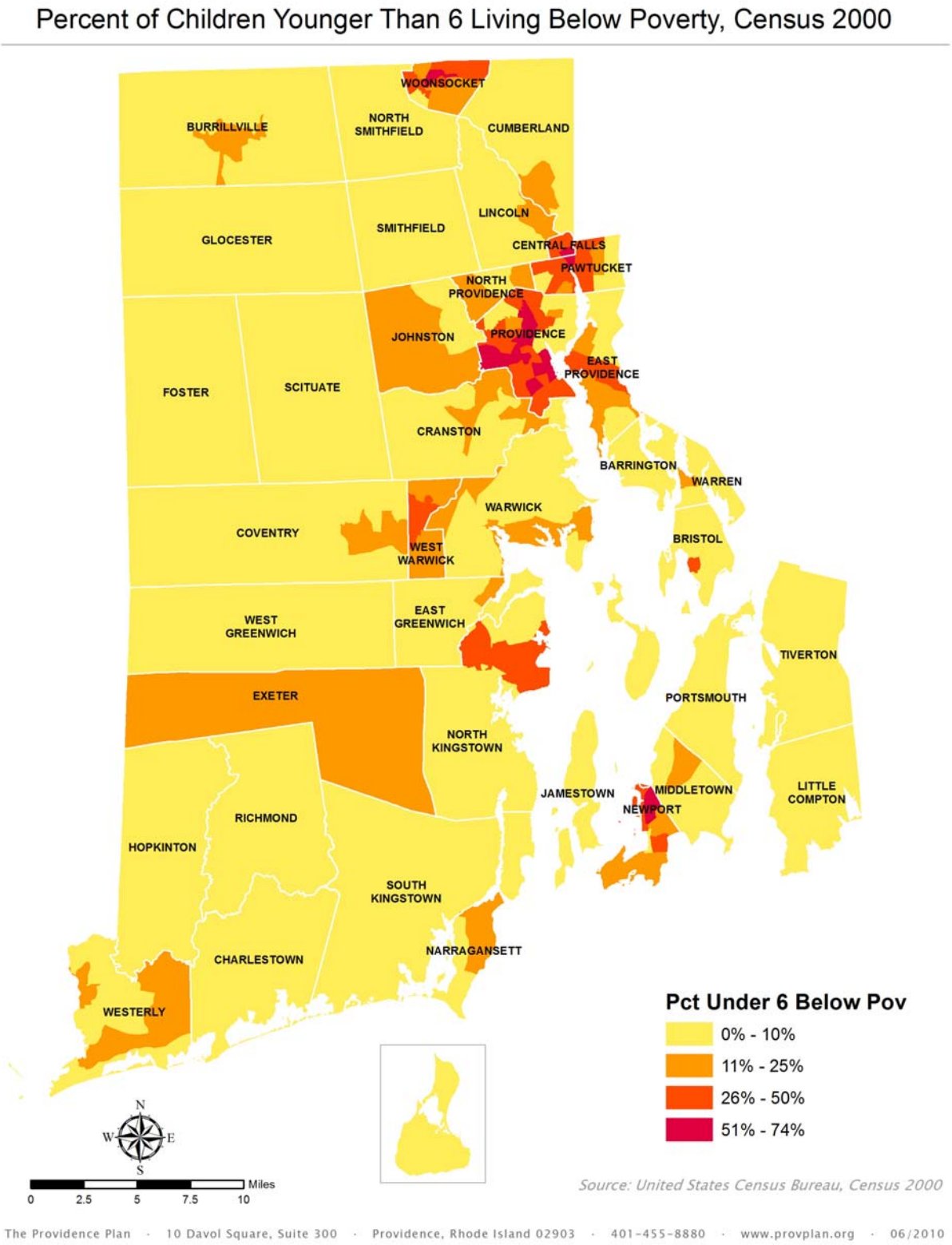

Percent of Children Younger Than 6 Living Below Poverty, Census 2000
WOONSOCKET
BURRILLVILLE
NORTH SMITHFIELD
CUMBERLAND
LINCOLN
GLOCESTER
SMITHFIELD
CENTRAL FALLS
PAWTUCKET
NORTH PROVIDENCE
JOHNSTON
PROVIDENCE
EAST PROVIDENCE
FOSTER
SCITUATE
CRANSTON
BARRINGTON
WARREN
WARWICK
COVENTRY
WEST WARWICK
BRISTOL
WEST GREENWICH
EAST GREENWICH
TIVERTON
EXETER
PORTSMOUTH
NORTH KINGSTOWN
JAMESTOWN
MIDDLETOWN
NEWPORT
LITTLE COMPTON
RICHMOND
HOPKINTON
SOUTH KINGSTOWN
NARRAGANSETT
CHARLESTOWN
WESTERLY
Pct Under 6 Below Pov
0% - 10%
11% - 25%
26% - 50%
51% - 74%
N
W
E
S
Miles
0
2.5
5
7.5
10
Source: United States Census Bureau, Census 2000
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Figure 56

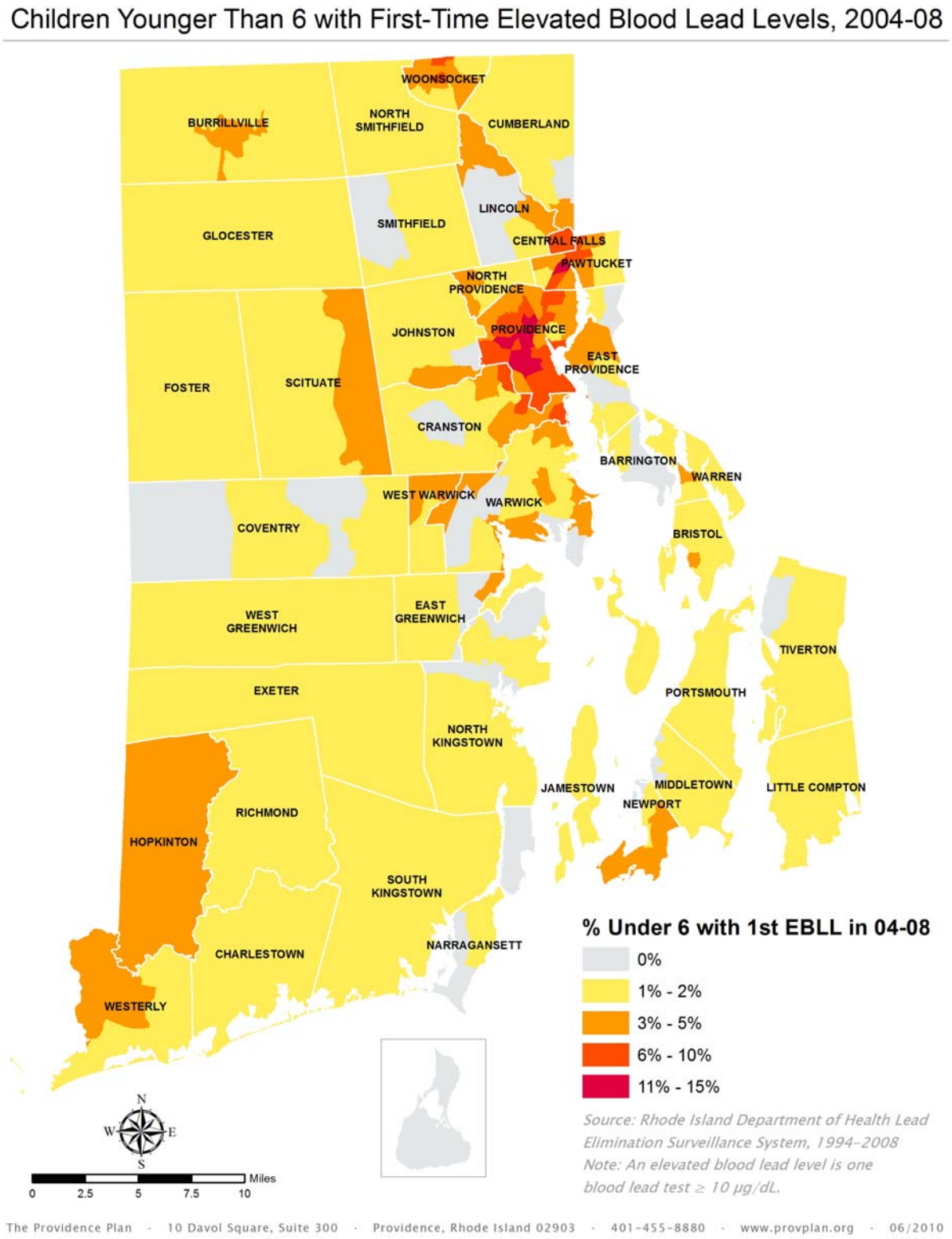
Children Younger Than 6 with First-Time Elevated Blood Lead Levels, 2004-08
WOONSOCKET
BURRILLVILLE
NORTH SMITHFIELD
CUMBERLAND
LINCOLN
GLOCESTER
SMITHFIELD
CENTRAL FALLS
PAWTUCKET
NORTH PROVIDENCE
JOHNSTON
PROVIDENCE
EAST PROVIDENCE
FOSTER
SCITUATE
CRANSTON
BARRINGTON
WARREN
WEST WARWICK
WARWICK
COVENTRY
BRISTOL
WEST GREENWICH
EAST GREENWICH
TIVERTON
EXETER
PORTSMOUTH
NORTH KINGSTOWN
JAMESTOWN
MIDDLETOWN
NEWPORT
LITTLE COMPTON
RICHMOND
HOPKINTON
SOUTH KINGSTOWN
NARRAGANSETT
CHARLESTOWN
WESTERLY
% Under 6 with 1st EBLL in 04-08
0%
1% - 2%
3% - 5%
6% - 10%
11% - 15%
Source: Rhode Island Department of Health Lead Elimination Surveillance System, 1994-2008
Note: An elevated blood lead level is one blood lead test ≥ 10 µg/dL.
N
W
E
S
Miles
0
2.5
5
7.5
10
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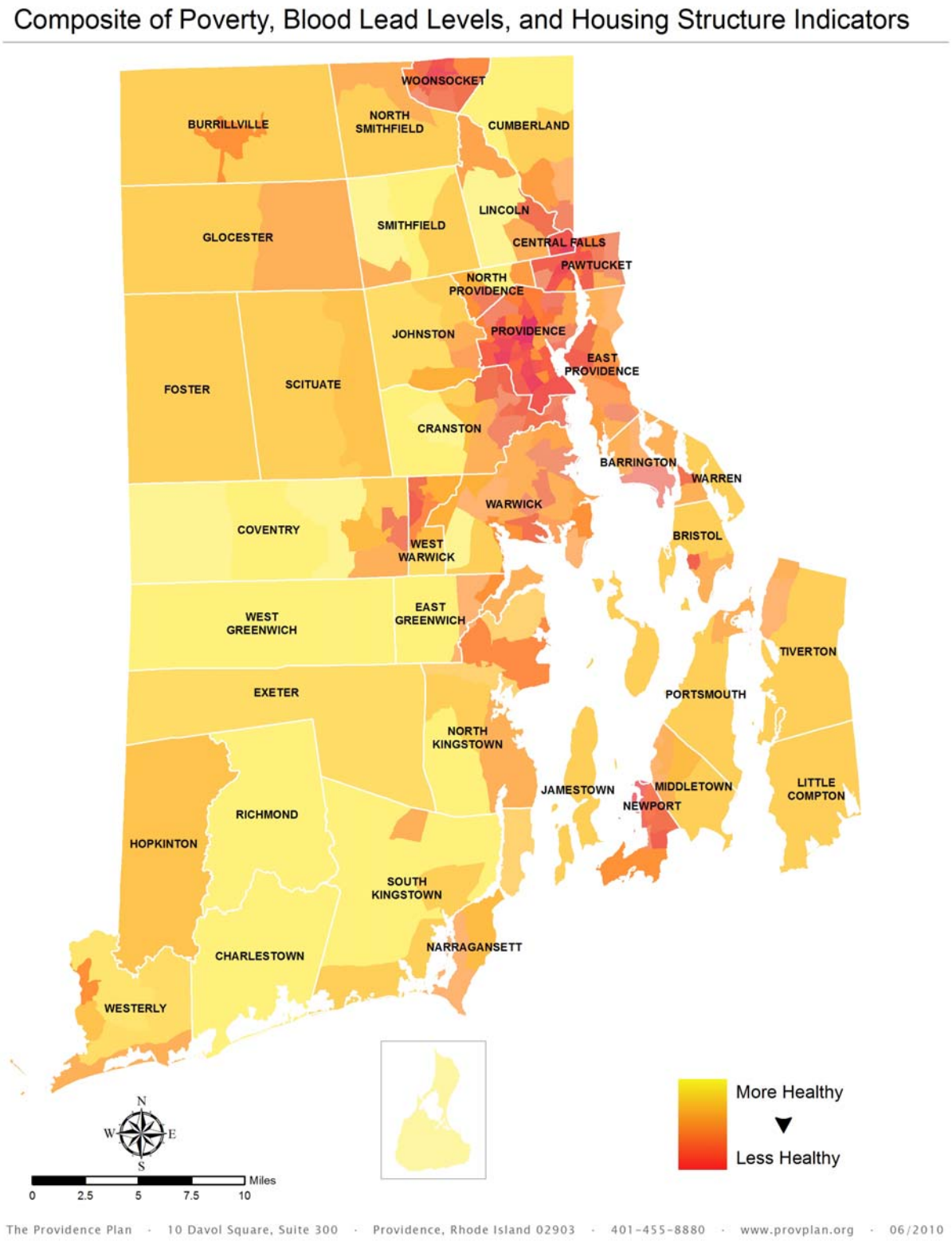
Figure 57


Composite of Poverty, Blood Lead Levels, and Housing Structure Indicators
WOONSOCKET
BURRILLVILLE
NORTH SMITHFIELD
CUMBERLAND
LINCOLN
GLOCESTER
SMITHFIELD
CENTRAL FALLS
PAWTUCKET
NORTH PROVIDENCE
JOHNSTON
PROVIDENCE
EAST PROVIDENCE
FOSTER
SCITUATE
CRANSTON
BARRINGTON
WARREN
WARWICK
COVENTRY
WEST WARWICK
BRISTOL
WEST GREENWICH
EAST GREENWICH
TIVERTON
EXETER
PORTSMOUTH
NORTH KINGSTOWN
JAMESTOWN
MIDDLETOWN
NEWPORT
LITTLE COMPTON
RICHMOND
HOPKINTON
SOUTH KINGSTOWN
CHARLESTOWN
NARRAGANSETT
WESTERLY
N
W
E
S
Miles
0
2.5
5
7.5
10
More Healthy
Less Healthy
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Lead Poisoning

In 2004, Rhode Island developed the Plan to Eliminate Childhood Lead Poisoning by 2010. This plan focuses on promoting primary prevention while maintaining secondary prevention efforts in the state. Primary prevention reduces or eliminates lead hazards in the environment before a child is exposed. Secondary prevention includes screening all children to identify those with elevated blood lead levels (BLL) and, in turn, removing or reducing any further exposure (Source: 2010 Childhood Lead Poisoning in Rhode Island: The Numbers).
In Rhode Island, healthcare providers are required by law to annually screen their patients between nine months and six years of age for lead poisoning. The screening process involves collecting a sample of blood from the child, either from a capillary (finger stick) or a vein (venous test), and analyzing the blood to determine the amount of lead in the sample. Blood lead levels are measured and reported as micrograms of lead per deciliter of blood (μg/dL or mcg/dL) (Source: 2010 Childhood Lead Poisoning in Rhode Island: The Numbers).

Prior to July 1, 2004, if a child younger than six years old had a capillary blood lead level ≥ 20 μg/dL, the Rhode Island Department of Health would recommend that the child have a confirmatory venous test within three months. On July 1, 2004, the Rhode Island Department of Health revised the Lead Screening and Referral Guidelines and began recommending a confirmatory venous test for any child younger than the age of six who had a capillary blood lead level ≥ 10 μg/dL (instead of ≥ 20 μg/dL). The Rhode Island Department of Health is also recommending that only venous tests be used for confirmatory purposes. Since these changes went into effect in July 2004, the first full year for which the RI CLPPP has confirmed capillary test data is 2005 (Source: 2010 Childhood Lead Poisoning in Rhode Island: The Numbers).

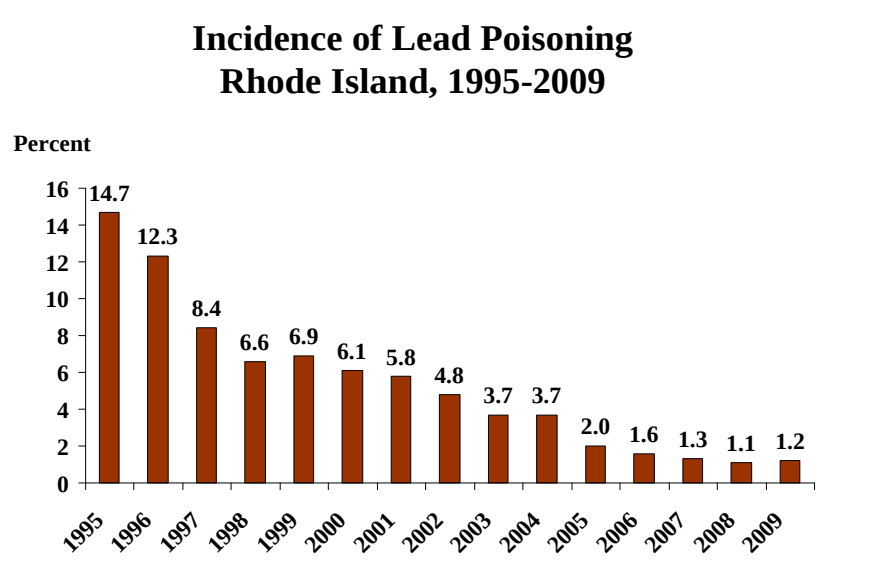
All healthcare providers in Rhode Island are required by law to annually screen their patients between nine months and six years of age for lead poisoning. Compliance with these guidelines is assessed by measuring the proportion of children born in a given year with at least one blood lead test by 18 months of age, and at least two blood lead tests, no less than 12 months apart, by 36 months of age. For birth cohorts 2005 and 2006, compliance with lead screening has increased. The number of children screened for lead poisoning at least once by 18 months of age went from 71.2% for children born in 2004 to 75.5% for children born in 2006 (Source: 2010 Childhood Lead Poisoning in Rhode Island: The Numbers).

Similarly, the number of children screened at least twice, no less than 12 months apart, by 36 months of age went from 39.8% for children born in 2004 to 42.2% for children born in 2006. The high screening rates among children by 18 months of age in Rhode Island may be attributed in part to pediatricians' and family physicians' access to KIDSNET, which is Rhode Island's integrated child health information system. KIDSNET allows healthcare providers to monitor lead screening among their patients and to generate reports of unscreened patients in their practices at any time (Source: 2010 Childhood Lead Poisoning in Rhode Island: The Numbers).

The RI CLPPP tracks and reports the number of new cases of lead poisoning (BLL ≥ 10 μg/dL) among children younger than six years of age who have not previously been poisoned. This statistic is known as the incidence of lead poisoning. The proportion of new cases among children screened for lead poisoning has declined dramatically from 6.9% (2,025/29,280) in 1999 to 1.1% (330/29,334 children) in 2008. Figure 58 displays the incidence rate for 2009 at 1.2% (324/27,478), which slightly higher than the 1.1% reported in 2008. This increase is

not due to an increase in the number of children being lead poisoned, but rather to a decrease in the number of children being screened for lead. In 2009, 324 children were lead poisoned compared to 330 children in 2008. Rhode Island must continue to focus on primary prevention and lead-safe housing to protect children from becoming lead poisoned in the future (Source: 2010 Childhood Lead Poisoning in Rhode Island: The Numbers).

Figure 58



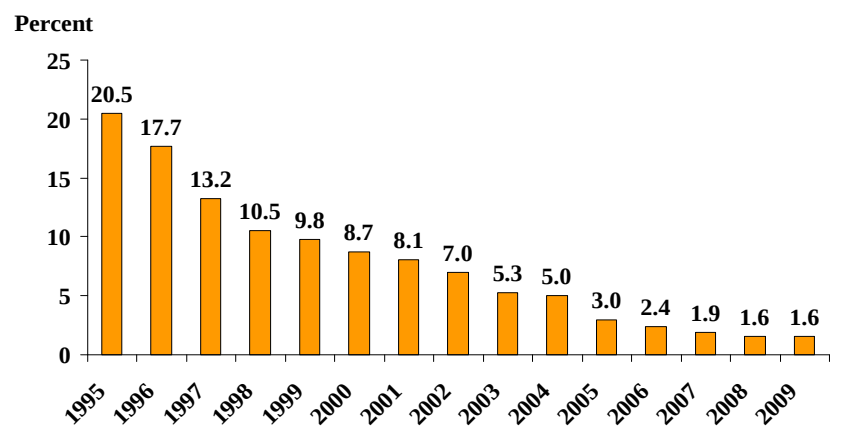
Note: Incidence is the proportion of new cases of lead poisoning (lead levels at or above 10ug/dL) among children aged less than six screened for lead poisoning

Source: Childhood Lead Screening Program, Rhode Island Department of Health

Prevalence of Lead Poisoning in Rhode Island

The prevalence of lead poisoning is the number of children younger than the age of six who are lead poisoned at a given point in time. The data show a steady decline in the prevalence of lead poisoning over the last ten years, from 9.8% in 1999 to 1.6% in 2009. As shown in Figure 59, although the prevalence of lead poisoning in Rhode Island has steadily declined, a total of 438 children were lead poisoned in 2009. In order to decrease prevalence in the future, Rhode Island must continue to promote policies to increase lead-safe affordable housing.

Figure 59

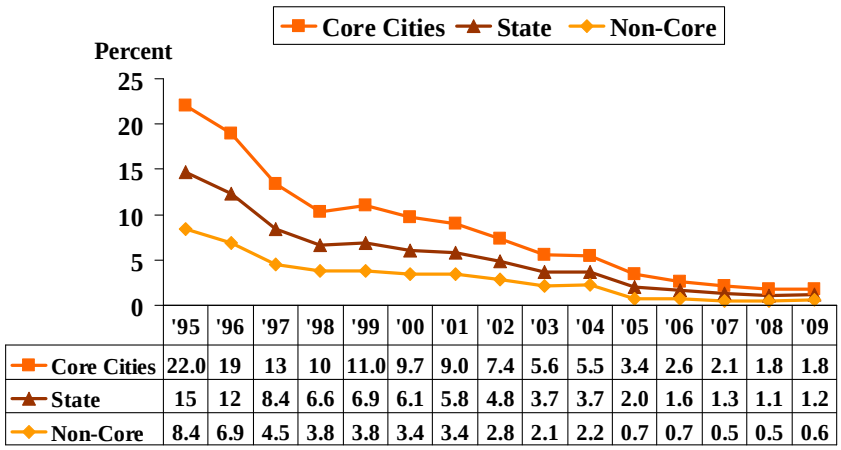


Note: Prevalence is the percent of tested children who had lead levels ≥10ug/dL at a specific point in time
Source: Childhood Lead Screening Program, Rhode Island Department of Health

Geographic Disparities

Although all Rhode Island cities and towns have experienced a dramatic decline in incidence over the last ten years, cases of lead poisoning continue to be concentrated in the core cities. In 2009, the incidence of lead poisoning in the core cities remained at 1.8%, compared to 0.6% in the other cities and towns. Figure 60 reveals that rates vary within the core cities and were highest among children living in Providence (5.1%) and Central Falls (4.8%) and lowest among children in West Warwick (0.5%) and Newport (1.2%). In 2010, the 151 lead poisoned children who lived in Providence represented half (50%) of the 300 total number of new lead cases in the state. Rhode Island must continue to focus its efforts on increasing the availability of lead-safe housing, particularly in the core cities.

Figure 60



Incidence of Lead Poisoning by Selected Geographic Areas Rhode Island, 1995-2009

	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
Core Cities	22.0	19	13	10	11.0	9.7	9.0	7.4	5.6	5.5	3.4	2.6	2.1	1.8	1.8
State	15	12	8.4	6.6	6.9	6.1	5.8	4.8	3.7	3.7	2.0	1.6	1.3	1.1	1.2
Non-Core	8.4	6.9	4.5	3.8	3.8	3.4	3.4	2.8	2.1	2.2	0.7	0.7	0.5	0.5	0.6

Note: Incidence is the percent of new cases with lead levels ≥10ug/dL

Source: Childhood Lead Screening Program, Rhode Island Department of Health

Services Offered to Lead Poisoned Children

Blood Lead Level 10-14 µg/dL

In 2009, 374 children had first-time elevated blood lead levels between 10-14 µg/dL. The families of these children were sent educational materials.

Blood Lead Level 15-19 µg/dL

In 2009, 68 children had first-time elevated blood lead levels in the 15-19 µg/dL range. The families of these children were referred to one of four lead centers. These non-profit agencies, which are funded by Medicaid, offer comprehensive case management services to families of children with lead poisoning. The lead centers offer each family in-home lead education, nutrition advice, and coordination of medical care with the family's primary care provider. Of the 68 cases referred, 58 (85%) accepted services, while 10 (15%) declined.

Children with Significant Lead Poisoning

Children with significant lead poisoning are offered an inspection of the child's home. The Rhode Island Department of Health sends certified lead inspectors to determine whether lead hazards are present, and, if hazards are found, it works with property owners to make the property lead-safe. In 2009, 65 environmental inspections were offered, of which 48 inspections were performed. Of the 48 inspections performed, 36 are ongoing and in various stages of abatement, seven were parent-owned and therefore the parents' responsibility to pursue, four were

completed, and one was determined not to be a violation. Of the 17 inspections that were offered but not performed, 11 were refused, three were for properties from which the lead poisoned child had moved, one received no response, and two are pending.

Case Management

Significant lead poisoning among children aged less than six is defined as blood lead levels at or above 20 µg/dL, or two blood lead tests ≥ 15 µg/dL, done between 90 and 365 days apart. Children with significant lead poisoning are referred to lead centers for case management services. The number of children with significant lead poisoning has continued to decline. Between 2002 and 2006, the number of children with significant lead poisoning was cut in half, from 201 in 2002 to 102 in 2006. By 2009, this numbers has decreased again by 56%, from 102 in in 2006 to 45 in 2009. Of the 45 significantly lead poisoned children referred to lead centers in 2009, 41 (91%) accepted services. The remaining 4 (9%) did not receive services from lead centers because the family either refused service or could not be located after several attempts to contact them. Non-medical case management will continue to help children who are already lead poisoned. However, primary prevention measures are needed to protect children from being exposed to lead and to assist Rhode Island in eliminating lead poisoning.

Lead Poisoning among Children Entering Kindergarten

Rhode Island state law requires healthcare professionals to screen all children for lead poisoning prior to entering kindergarten. The number of children entering kindergarten who have ever had an elevated blood lead level has decreased by about 50% over the past few years. Of the 12,384 children who will enter kindergarten in 2011, 2.4% (302) have had a blood lead level ≥ 10µg/dL. The benefits to the educational system as fewer and fewer children are exposed to lead each year have not yet been determined, though elevated blood lead levels have been shown to impact children's IQs and learning capabilities.

Environmental Inspections

Families of significantly lead poisoned children are offered a comprehensive environmental lead inspection at no cost. The landlord's permission is neither required nor sought for the inspection to occur. In 2009, 65 environmental inspections were offered to families with significantly lead poisoned children. This includes children who were identified as significantly lead poisoned in 2009, as well as those whose inspections were pending at the end of 2008. Inspections were performed at 48 of these homes. As of February 12, 2010, two inspections were pending.

Rhode Island's crisis in obtaining affordable housing may contribute to a family's decision to refuse an inspection for fear of eviction. The percentage of families refusing an environmental inspection varies from year to year. Between 2008 and 2009, there was a decrease from 25% to 17% of families that decided not to accept a lead inspection of their home. In three cases in 2009, the family moved before the inspection was offered and/or performed. In these cases, the family was offered an inspection at their new address and a letter was sent to the

previous address informing the new occupants that if they had children younger than six years of age residing at the address, they could receive a free inspection. No tenants at the previous addresses have requested an inspection.

Hospitalizations among Children

According to Rhode Island hospital discharge data, during 2009 there were 6,456 hospitalizations among children less than 18 years old. This figure is consistent with injuries reported in 2000, when there were 6,473 hospitalizations. Over one in four, or 1,837 (28.5%), of these hospitalizations were related to the respiratory system. There were 536 injuries and poisonings representing the second leading cause (8.3%) of child hospitalizations. Children aged less than five represented nearly half, or 3,092 (47.9%), of all hospitalizations among children. The remaining hospitalizations were divided among children aged 5-12 (23.2%) and aged 13-17 (28.9%).

Overall, the most frequent diagnoses were acute respiratory infections (n=566, 8.8%); asthma (n=554, 8.6%); signs and symptoms (n=414, 6.4%); and pneumonia (n=404, 6.3%). Acute respiratory infections and asthma accounted for almost one-fifth (17.3%) of the hospitalizations among children aged less than 5. These diagnoses only accounted for 2.8% of hospitalizations among children aged 5-12 and for 1.0% among children aged 13-17. A discussion of asthma follows.

Asthma Hospitalizations

Rhode Island is making great strides in improving the quality of life for people with asthma. The Rhode Island Department of Health's Asthma Control Program and the Asthma Coalition and its committees are committed to securing a high measure of quality of life for all Rhode Islanders who have asthma and their families.

Proper asthma management requires assessment and monitoring, patient education, environmental control, and medication. A primary care provider acting in partnership with the family as a child's medical home can provide the connections to specialty and support services needed to help manage asthma.

According to the 2010 Rhode Island KIDS COUNT Factbook, asthma is the number one chronic condition in children and the third-ranked cause of hospitalization in children under age 15. Asthma is also the leading cause of school absences resulting from chronic illness. In 2008, nearly 14% of children under age 18 in the U.S. had ever been diagnosed with asthma, and 9.5% reported currently having asthma. Most cases of childhood asthma can be managed by the child's primary care physician, and timely medical care can prevent severe episodes of asthma. Hospitalization for asthma may indicate that the child has not had adequate outpatient management for the disease.

According to the 2007 Rhode Island Behavioral Risk Factor Surveillance System (RI BRFSS), an estimated 26,696 Rhode Island children have asthma, or about 11.3% of the state child population, versus 9% nationally. This number increases to over 39,000 (17%) for children who were reported to have ever had asthma. The asthma prevalence among Rhode Island children increased 2% between 2005 and 2007.

Nationally, asthma is the most common chronic condition in children, the third-ranked cause of hospitalization for children under age 15, and one of the leading causes of school absences. During 2005-2006, 25% of children with current asthma missed one or more school days in the past year due to asthma (Source: RI BRFSS, 2005–2006). Additionally, nearly 40% of middle school students (37.8%) live with someone who is a current

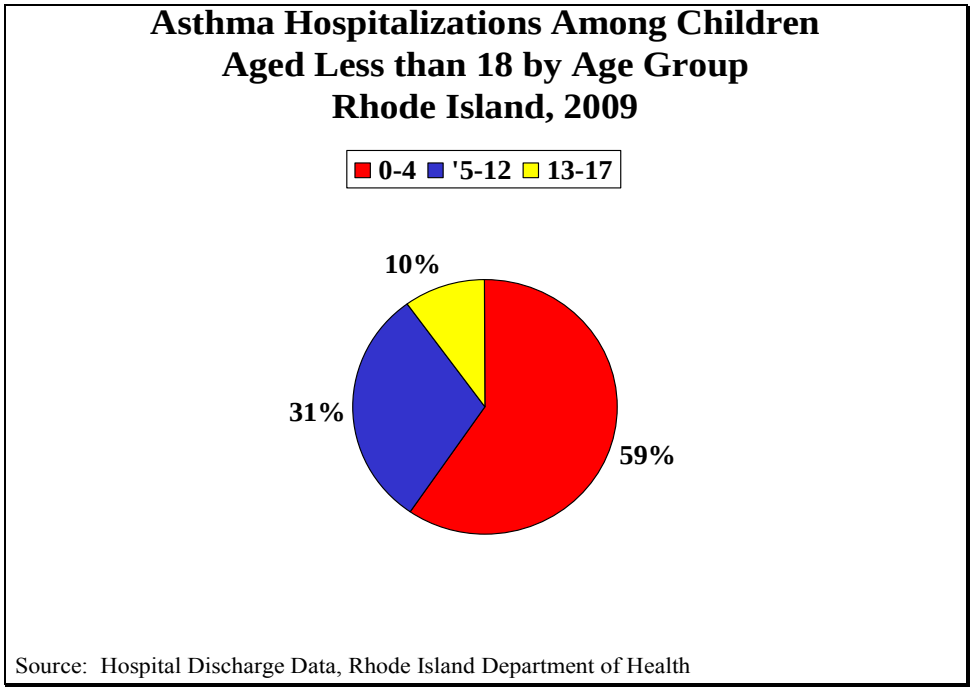
smoker, putting 12,177 children at risk for serious health problems (RI Youth Risk Behavior Survey, YRBS, 2007), such as sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, worsening of allergies, and more severe asthma in those who have the disease (US Surgeon General, 2006).

In Rhode Island during 2009, 554 children under the age of 18 were hospitalized with a primary diagnosis of asthma. Children aged 5-9 accounted for 169 hospitalizations (30.5%), and those aged 13-17 accounted for 200 hospitalizations (10.1%) (Figure 61).

The average length of a hospitalization stay for a child with asthma in Rhode Island is two days. In Rhode Island, children under age five have the highest number of asthma hospitalizations and the highest charges compared with children 5-17. The average cost of a two day hospitalization for asthma is $7,840 (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2007, there were 1,856 emergency room visits by children due to a primary diagnosis of asthma, with an average charge of $1,823 per visit. Children under age five accounted for 46% of all emergency room visits, and their average charge per visit was $2,013 (Source: 2010 Rhode Island KIDS COUNT Factbook).

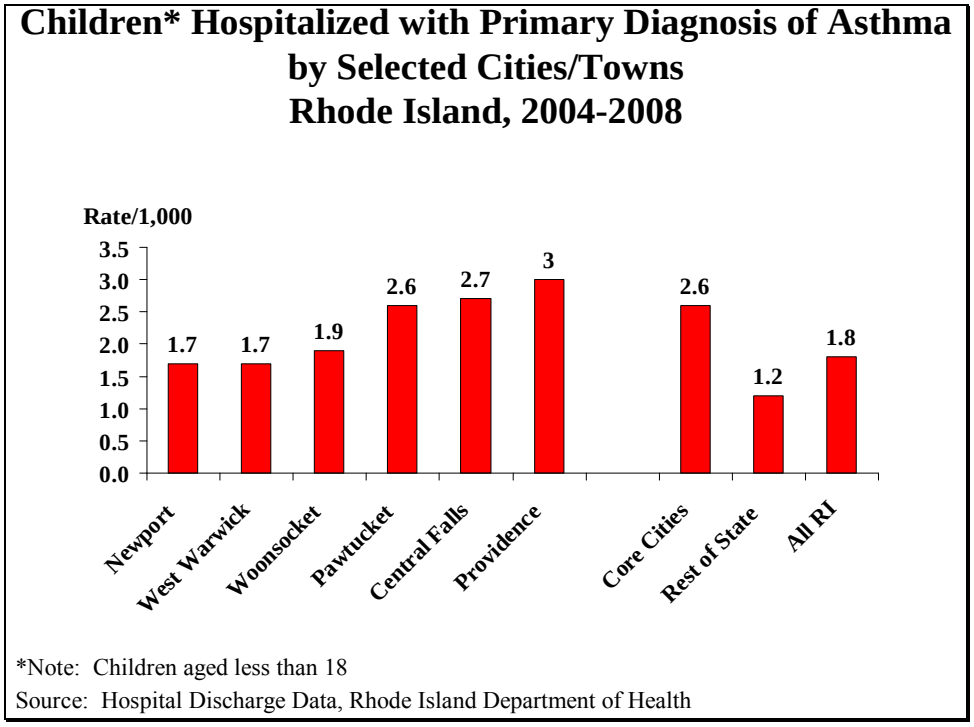
Figure 61



Geographic Disparities

Between 2004-2008, 1,193 (52.6%) of the 2,268 hospitalizations of primary asthma diagnosis occurred among children residing in the core cities. Hospitalization rates for asthma were nearly twice as high among children residing in the core cities (2.6 per 1,000) than the rate for children living in the rest of the state (1.2 per 1,000). During 2004-2008, rates continued to vary among the core cities, ranging from 1.7 (Newport and West Warwick) to 3.0 (Providence) (Figure 62).

Figure 62



Racial Disparities

Although asthma prevalence data for children in Rhode Island by race and ethnicity is not available, age-specific hospitalization rates for pediatric asthma by race/ethnicity highlight important disparities. The hospitalization rates due to asthma are significantly higher for Black non-Hispanic and Hispanic children. In Rhode Island between 2004 and 2008, the hospitalization rate for primary diagnosis of asthma for Black children was almost four times the rate for non-Hispanic White children. Hispanic children were hospitalized for asthma almost two and a half times as often as White children (Source: 2010 Rhode Island KIDS COUNT Factbook).

During 2009, disparities among racial/ethnic groups are more evident when the rate of asthma hospitalizations per 1,000 children aged less than eighteen are compared. The asthma hospitalization rate among Black/African American children (10.3) was over three times higher than the rate for Whites (2.9). Children of Hispanic/Latino ethnicity were nearly twice as likely to have an asthma-related hospitalization (5.6) than White children. Asian children had the lowest asthma hospitalization rate (2.5), which was also far below the statewide rate of 4.2.

Asthma Hospitalizations by Insurance

According to the 2007 hospital discharge data, disparities in asthma-related admissions by payer type (an indirect measure of poverty) exist. Medicaid was the primary payer for over half (52%) of the hospitalizations for pediatric asthma followed by private insurance (44%) and self-pay (4%).

Child Injuries

During 2009, among the 6,456 hospitalizations among children aged less than eighteen, 536 (8.3%) were related to injuries and poisonings. This represents a decrease (28%) from 1998, when 747 (10.9%) of the 6,837 hospitalizations were related to injuries and poisonings. Falls were the most frequent cause of these injury hospitalizations (27%), followed by pedestrian motor vehicle accidents (9.5%), self-inflicted injuries (9.0%), and assaults (8.0%).

According to the 2007 National Survey of Children's Health, 6.4% of children aged 0-5 in Rhode Island had an injury requiring medical attention, nearly one-half of the percentage reported in the 2003 survey (12.0%) among Rhode Island children.

Children in the WIC Program

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a preventive program providing nutritious food, nutrition education and improved access to health care. WIC serves pregnant women, infants and children under the age of five. Household income must be below 185% of the federal poverty level. Participants must have a specified health or nutritional risk (e.g., abnormal pregnancy weight gain, iron deficiency anemia, etc.). 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. Participants must have a specified nutritional risk, such as anemia, high-risk pregnancy, abnormal growth, or be in need of supplemental foods for their diet

From a life course perspective, compared to children who receive WIC benefits, young children who are eligible for WIC but not enrolled are more likely to be in poor health, have developmental delays and experience food insecurity (i.e., live in families that do not always have enough food for an active healthy life). Food insecurity in early childhood can lead to impaired cognitive and socio-emotional development, limiting school achievement. Pregnant women also have special nutritional needs that influence pregnancy outcomes and the health of their children. WIC participation has been shown to reduce infant mortality, improve birth outcomes (including reducing the likelihood of low birthweight and prematurity), protect against underweight and poor nutrition in infants, increase immunization rates, improve cognitive development, and increase the likelihood of having a source of regular medical care. (Source: 2010 Rhode Island KIDS COUNT Factbook)

As of September 30, 2009, 28,268 women, infants and children participated in the Rhode Island WIC Program. This is roughly similar to the figures from September 30, 2008 when participation in the program was 28,810. Among these participants in 2009, 11% were pregnant women, 11% were postpartum women, 22% were infants, and 55% were children aged 1-4. Nearly two thirds (69%) of the participants were White, 16% were Black/African American, 3% were Asian, and 11% were of other or multiple races. More than one-third (38%) of the participants were of Hispanic/Latino ethnicity. Hispanics are included in the racial groups above (Source: WIC Program).

Among the 28,268 participants, 19,167 (68%) lived in the core cities. Participation rates in the WIC Program have been increasing and in 2009, 77% of those eligible statewide were enrolled in the program. This figure is higher among those living in the core cities with 80% of those eligible participating in the program. Five of the six core cities – Central Falls (77%), Newport (79%), Pawtucket (78%), Providence (80%), and Woonsocket (87%) – had WIC participation rates equal to or exceeding the statewide enrollment rate of 77% in 2009. (Source: 2010 Rhode Island KIDS COUNT Factbook)

WIC also promotes breastfeeding. Breastfeeding mothers qualify for a special food package and program eligibility is extended for one year. WIC has implemented breastfeeding support programs including the TLC (Lactation Consultant) hospital-based perinatal breastfeeding support program to assist low income breastfeeding women prior to hospital discharge and the Mother-to-Mother Peer Counseling Program which provides culturally competent breastfeeding support and promotion among WIC participants. WIC promotes breastfeeding as the optimal method of infant feeding. In Rhode Island, 20% of WIC infants were breastfed in Federal Fiscal Year 2009 (Source: 2010 Rhode Island KIDS COUNT Factbook).

The WIC Farmers' Market Nutrition Program (FMNP) improves participants' intake of fresh fruits and vegetables by enabling participants to purchase produce at authorized local farmers' markets using WIC benefits. In Rhode Island, 67 farmers' markets provided fresh produce to 18,344 WIC participants through the Farmers' Market Nutrition Program during FFY 2009.18,19 (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2009, Congress revised appropriations to enhance the WIC food package, improving the health and nutritional quality of the foods in the program, and increasing participants' choice and expansion of cultural food options by offering more fruits, vegetables, and other new foods. WIC is not an entitlement program and is not funded at a level that is sufficient to serve all eligible women, infants, and children. Rhode Island received $20.6 million dollars in federal funding for WIC during Federal Fiscal Year (FFY) 2009 (Source: 2010 Rhode Island KIDS COUNT Factbook).

WIC and Preventive Services

The WIC Program works closely with the Lead Poisoning Prevention and Immunization Programs. In 2001, a process was developed to ensure that: children who are lead poisoned receive WIC services, all families are educated on lead poisoning prevention and screening, and children are screened for lead poisoning. During the WIC certification process, children's lead screening results are reviewed using KIDS NET, and referrals are made based on the following algorithm:

- If no lead screening result is found, the family is referred for lead screening.
- If the child requires follow-up screening, they are referred for screening.
- If results show the child has elevated blood lead levels, the child is eligible for WIC.

All families receive information on lead screening prevention. Families of children with elevated lead levels receive targeted nutrition education from the WIC nutritionist.

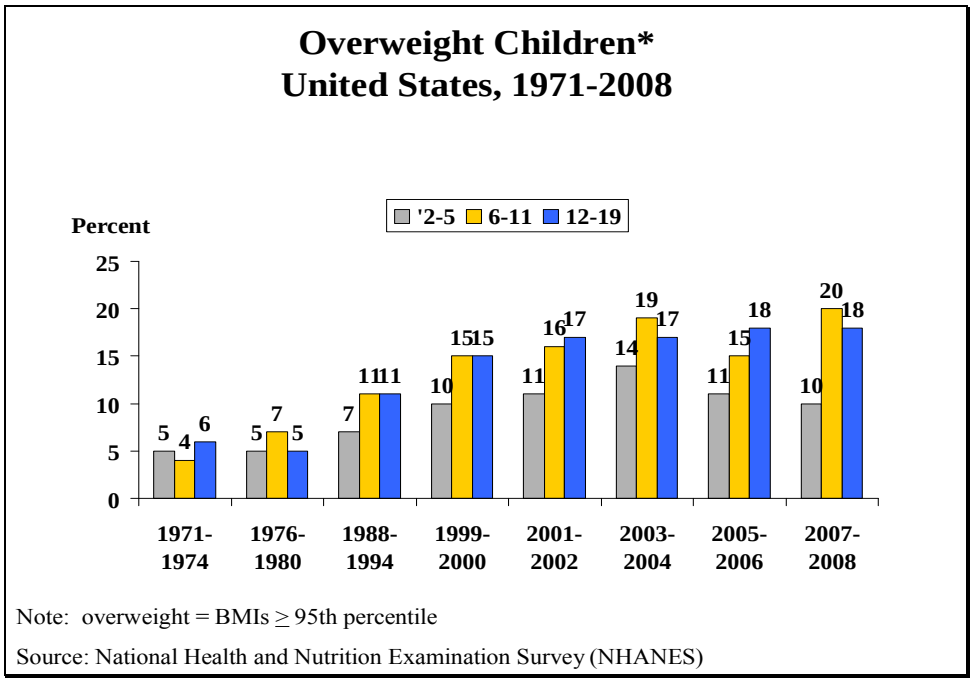
Since 2002, WIC has been screening the immunization status of WIC applicants under the age of two. WIC reviews immunization records and documents findings in the WIC chart. Children who are behind in their immunizations are referred to their health providers or free immunization clinics.

Childhood Obesity

Healthy People 2010 identified overweight and obesity as 1 of 10 leading health indicators and called for a reduction in the proportion of children and adolescents who are overweight or obese, but the United States has made little progress toward the target goal. Progress toward reducing the national prevalence of overweight and obesity is monitored using data from the National Health and Nutrition Examination Survey (NHANES). Over the past decades, the percentage of children that are overweight ($\geq$ 95th percentile) has been rising in the United States. Figure 63 shows that during 1971-1974 approximately 5% of children aged 6-19 were overweight and by 2007-2008 this figure had almost quadrupled to 19%. As in the nation, childhood obesity continues to be a significant health risk among children in Rhode Island. Data from multiple sources paint a bleak picture and indicate that more children in Rhode Island are overweight. These children are at higher risk for chronic diseases such as, type 2 diabetes, cardiovascular disease, hypertension, increased LDL cholesterol, asthma and other long term deleterious health consequences throughout the life course. Additionally, being overweight can impact some children's self esteem and/or lead to emotional health problems.

Data from the 2007-2008 National Health and Nutrition Examination Survey (NHANES) indicate the obesity rates among children in the United States continue to rise. Data for 2007-2008 show that one in five (20%) of children aged 6-11 were obese, as were 18% of children aged 12-19. These figures represent 3-5 fold increases from obesity rates in the 1970's. Obesity rates among children aged 2-5 (10%) are also two times the rate from the 1970's (5%).

Figure 63

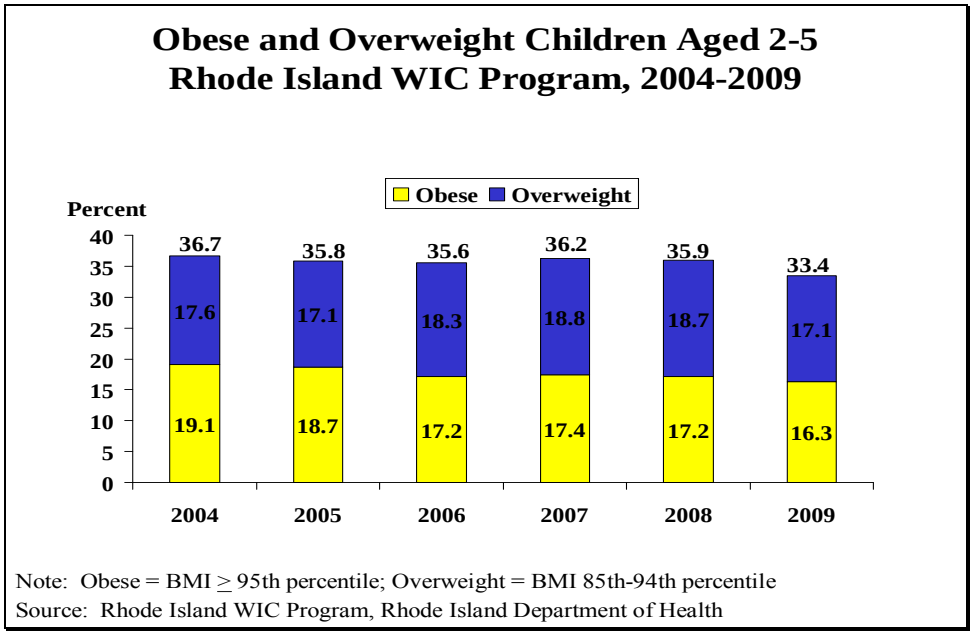


Children Aged 2-5: The Rhode Island WIC Program

Data are also available from the Rhode Island WIC Program for participants aged 2-5. The terms "obese" and "overweight" have been substituted for "overweight" and "at-risk for overweight". Obese is defined as having a body mass index (BMI) at or above the 95th percentile and overweight is defined as having a BMI between the 85th and 95th percentiles. A new height variable (eighths of an inch) was added to the WIC dataset. When this variable was included in the height calculation the overall BMI was reduced. For example, data for 2006 would have resulted in an obesity rate of 22.7%, but instead was reduced to 17.2% with the adoption of height measurements to the nearest eighth of an inch (Figure 64).

Data from the Rhode Island WIC Program indicate that the obesity rates among children aged 2-5 enrolled in the WIC Program indicate a slow decline. During 2007 and 2008, the obesity rates were 17.4% and 17.2%, respectively. 2009 data indicate a slight decrease in rates to 16.3%. It should be noted that these obesity rates vary by gender and geographic location, with males having higher rates (17.4%) than females (15.3%) and those residing in core cites (17.4%) having higher rates than those in non-core cities (13.7%).

Figure 64



Child obesity has been the most frequently identified growth risk among children in WIC. Feeding habits, parenting skills, poor nutrition and lack of exercise contribute to this problem.

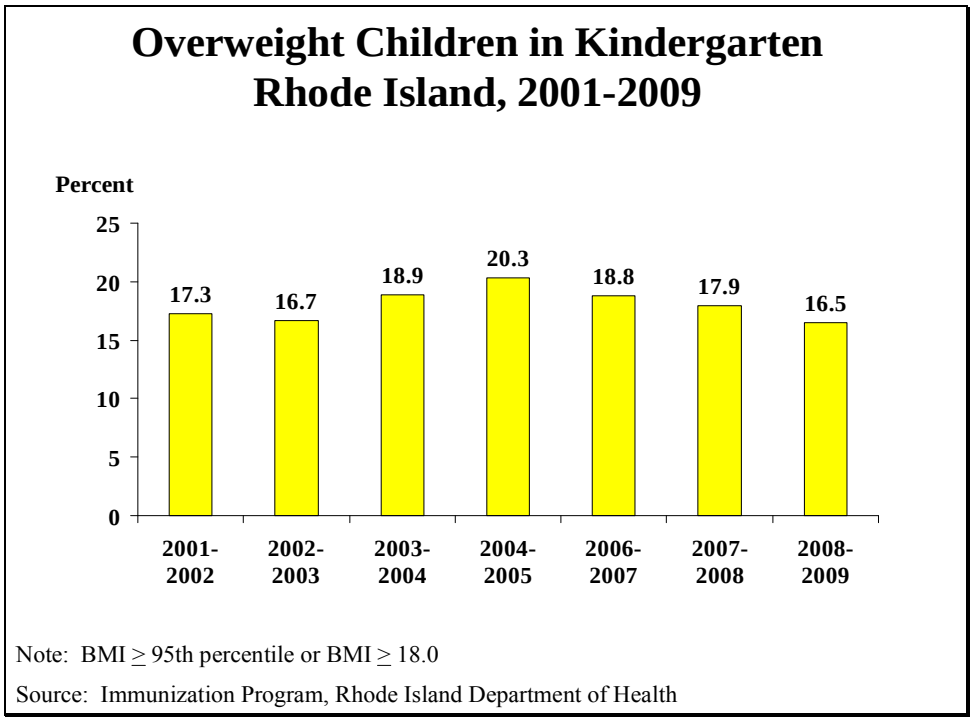
Children in Kindergarten (Aged 5): Immunization Program Data Collection

Child obesity has also increased among children entering kindergarten. The Rhode Island Immunization Program collects height and weight data among the kindergarten children it samples (Figure 65). Based on CDC growth charts for boys and girls aged 5, a BMI of 18.0 or greater (or >= 95th percentile) is considered obese. Gender is not recorded during the data collection process. Of the 868 children for whom data were collected, 143 (16.5%),

or one in six had a BMI of 18.0 or greater down from a high of 20.3% in the 2004-2005 school year. The Healthy People 2010 objective is 5%.

The obesity rates among kindergartners vary by ethnicity, where those of Hispanic/Latino ethnicity had the highest rate (24.7%), nearly twice that of White, non-Hispanics (13.6%). The obesity rate among kindergartners who were Black/African American (11.4%) were lower than the overall rate – although the data on race/ethnicity are missing 26% of the data for the 2008-2009 school year.

Figure 65



Note: BMI ≥ 95th percentile or BMI ≥ 18.0

Source: Immunization Program, Rhode Island Department of Health

Obesity among Seventh Graders: Immunization Program Data Collection

Starting in the 2006-2007 academic year, the Immunization Program began collecting heights and weights, in addition to vaccine histories, from records of 7th graders. Of the 917 records with heights and weights, 154 (16.8%) were obese and 192 (20.9%) were overweight. Rates were higher among those of Hispanic/Latino ethnicity (19.5%) compared to the rate for Whites (16.1%) and Black/African Americans (16.1%). Numbers were too small and statistically unreliable for Asians and Native Americans.

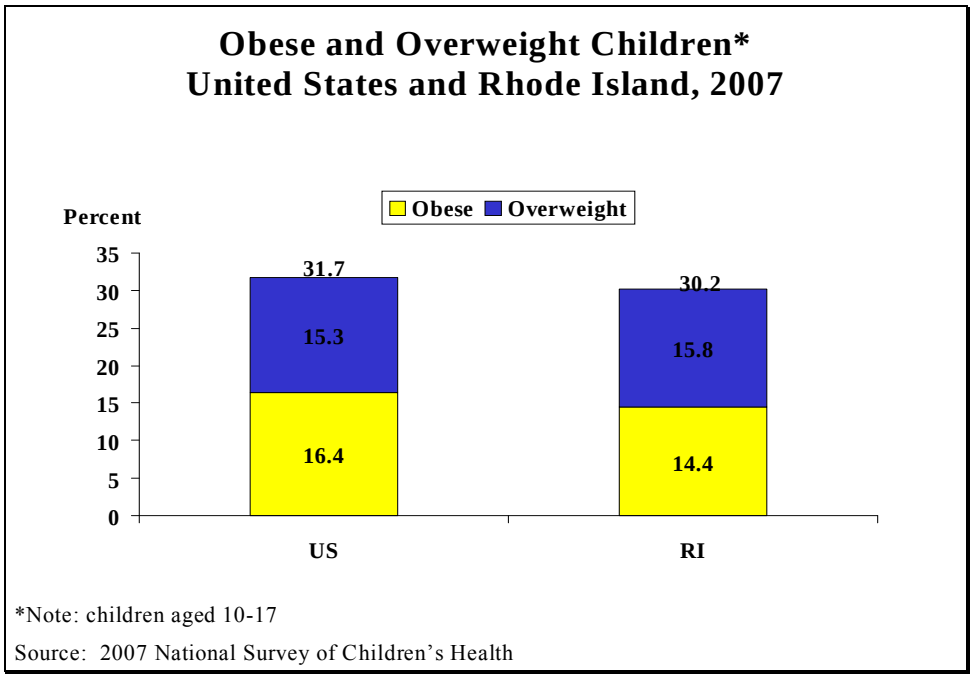
During 2008-2009, 19.0% of seventh graders were determined to be obese. Rates were higher among those of Hispanic/Latino ethnicity (30.0%) and Black/African Americans (23.0%).

Obesity among Children Aged Less than 18: National Survey of Children's Health

Data from the 2007 National Survey of Children's Health indicate that 14.4% of Rhode Island children aged 10-17, are obese and 15.8% are overweight (Figure 66). These rates are slightly lower than those nationwide (16.4% obese and 15.3% overweight). There were significant disparities for racial and ethnic minorities.

Nationwide, 41.1% of Black children and 41.0% of Hispanic children ages 10 to 17 were overweight or obese in 2007, compared to 26.8% of White, non- Hispanic children.

Figure 66



Contributing Factors to Child Obesity

Maternal excess weight during the prenatal period and gestational diabetes can put children at risk for obesity early in life. Breastfeeding has been found to have significant long-term potential for maintaining a lower BMI. Nationwide, one in seven (14.6%) low income, preschool-aged children is obese (Source: 2010 Rhode Island KIDS COUNT Factbook).

Physical Activity and Screen Time

According to the 2007 National Survey of Children's Health, in Rhode Island 28% of children aged 6-17 engaged in physical activity everyday, where 63% of children reported engaging in one to six days of vigorous physical activity in the past week, compared with 62% nationally. Additionally, 10% of the children did not exercise or participate in physical activity for 20 minutes that made them sweat or breathe hard during any days in the past week. Approximately 7.5% of children aged 6-17 watched television, watched videos, or played video games for 4 or more hours on a usual school day.

Rhode Island Initiative for a Healthy Weight

The Rhode Island Initiative for a Healthy Weight (IHW) coordinates, supports, and implements activities to promote lifelong healthy eating and active living among all Rhode Islanders. An emphasis on childhood obesity is

one of the initial priorities for action in the Initiative for a Healthy Weight's obesity prevention plan, Rhode Island's Plan for Healthy Eating and Active Living. The IHW has set two goals related to child obesity:

1) By 2015, reduce by 50% the number of children entering kindergarten who are overweight or obese; and
2) By 2015, reduce by 50% the number of children entering 7th grade who are overweight or obese.

Obesity and Rhode Island Schools

As discussed in the IHW plan, children spend more time in school than in any other environment away from home. Schools have a unique opportunity to prevent obesity by creating an environment where children eat healthy foods, engage in regular physical activity, and learn lifelong skills for healthy eating and active living. Children consume up to 50% of their total daily calories at school. Because food choices are influenced by the total food environment, it is important that healthy foods are available, and unhealthy foods are limited.

The plan also highlights the important fact that schools can also influence physical activity behaviors. Most of the time children spend in school is sedentary, making quality physical education critically important to ensure that children meet national physical activity recommendations. Research has shown that the odds of becoming an overweight adult decrease for each weekday of physical education. Walking to school is another way to increase physical activity levels. A growing body of research has found that walking to school is associated with higher overall physical activity throughout the day. By ensuring that children have access to healthy foods, limited access to unhealthy foods, and opportunities to be physically active, schools can help children adopt lifelong healthy lifestyles.

Recent changes in school nutrition policy have made Rhode Island school meals among the healthiest in the country. Rhode Island is one of 19 states that implement nutritional standards for school meals and snacks that go beyond existing USDA requirements. The 2009 Rhode Island Nutrition Requirements (RINR), which went into effect in September 2009, encourage consumption of more fruits, vegetables, whole grains, and legumes in school meal programs such as school breakfast and school lunch. (Source: 2010 Rhode Island KIDS COUNT Factbook)

Statewide Policy Changes for Healthy Schools

Kids First Inc. and the Healthy Schools Coalition have played a major role in changing state policies to improve the health of students. In 2008, the RI General Assembly passed a law that requires all schools to implement health education and physical education based on RI education frameworks. This law, which takes full effect in 2012, will improve the quality of school health and physical education. Under RI General Law, schools are also required to sell only healthier snacks and beverages in vending machines, a la carte, and at school fundraisers on the premises. In addition, in 2009 the Board of Regents approved the adoption of the RI Nutrition Requirements (RINR), which includes more fruits and vegetables and whole grains and less sodium in school meals. All Rhode Island public schools will be required to follow RINR beginning in the 09-10 school year..

Food Insecurity

Although child obesity has been rising, the rate of food insecurity in Rhode Island has also been rising. Approximately 115,000 Rhode Islanders are food insecure and one-third of them are children. The USDA defines food insecurity as not always having access to enough food for an active and healthy life. Between 2006 and 2008, 11.7% of Rhode Island households and 12.2% of United States households were food insecure. In 2008, more than one in every five (21.0%) U.S. households with children were food insecure, while one-half (50.3%) of U.S. households with children with incomes below the poverty level experienced food insecurity (Source: 2010 Rhode Island KIDS COUNT Factbook).

More than 50,000 Rhode Islanders receive emergency food assistance from food pantries and soup kitchens each month, and 41% of food pantry clients have children at home. In 2009, over one-half (57%) of Rhode Islanders who accessed emergency food assistance also received SNAP benefits, up from 35% in 2006 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Rhode Island Women, Infants and Children (WIC) Program Participant Survey Data

Data from the Rhode Island WIC Program indicate that many low income families are struggling to provide adequate quantities and quality of food for their households. Participants in the WIC Program include pregnant and postpartum women as well as infants and children under the age of five who meet income eligibility criteria and have a nutritional risk. WIC participation has been shown to reduce infant mortality, improve birth outcomes (including reducing the likelihood of low birth weight and prematurity), protect against underweight and poor nutrition in infants, increase immunization rates, improve cognitive development, and increase the likelihood of having a source of regular medical care. WIC promotes breastfeeding as the optimal method of infant feeding. In Rhode Island, 20% of WIC infants were breastfed in Federal Fiscal Year 2009 (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2009, Congress revised appropriations to enhance the WIC food package, improve the health and nutritional quality of the foods in the program, and increase participants' choice and expansion of cultural food options by offering more fruits, vegetables, and other new foods (Source: 2010 Rhode Island KIDS COUNT Factbook).

School Breakfast

The School Breakfast program is fundamentally important to eliminating child hunger, and it has been proven to improve children's health, school attendance, and behavior. School Breakfast Programs provide nutritious and balanced meals that help children meet their Recommended Daily Allowances of four key nutrients. Children who participate in school breakfast programs are more likely to have higher standardized test scores, fewer absences, reduced tardiness, better behavior and lower risks of obesity (Source: 2010 Rhode Island KIDS COUNT Factbook).

In the 2000 legislative session, the Rhode Island General Assembly strengthened the School Breakfast law that first passed in 1998 by expanding the program to include all public schools. Still, not all students participate. According to the 2010 Rhode Island KIDS COUNT Factbook, during the 2008-2009 school year, 39 low income

students participated in the School Breakfast Program for every 100 low income students that participated in the School Lunch Program. Rhode Island ranks 41st in the country for participation in the School Breakfast Program, which is a regression from 37th last year.

Universal school breakfast offers school breakfast free to all students, regardless of family income. Currently, there are five school districts (Central Falls, Cranston, Pawtucket, Providence, and Woonsocket) in Rhode Island that offer universal free school breakfast to every student in the public schools, as well as select schools in East Providence. In 2009, the percentage of low income students participating in School Breakfast Programs in schools offering universal school breakfast was 31% compared with 19% of students participating in non-universal programs in the remainder of the state (Source: 2010 Rhode Island KIDS COUNT Factbook).

Data from the 2009 Rhode Island KIDS COUNT Factbook show that 17,664 (29.4%) of Rhode Island's 59,988 low income students participated in the Universal School Breakfast Program as of October 2008. An average of 20,133 breakfasts were served daily in Rhode Island public school, of which 16,576 (82.3%) were to low income children who were eligible for free or reduced-priced meals. Among the low income students receiving breakfast, 12,515 (75.5%) lived in the core cities.

Oral Health

Tooth decay is an infectious disease process affecting both children and adults. It is probably the most widespread disease known to man. Tooth decay is the single most common chronic disease of childhood, five times more common than asthma (Source: Edelstein B, Douglass C. Dispelling the cavity free myth. Public Health Reports 1995, 110:522-30). Tooth decay affects more than half of all children by the third grade; by the time children finish high school, almost 80% have decay (Source: National Center for Health Statistics. National Health and Nutrition Examination Survey III, 1988-94. Hyattsville, MD: Centers for Disease Control and Prevention, unpublished data). Many do not consider tooth decay to be a serious problem, yet if left untreated, tooth decay can lead to difficulty in speaking, chewing, swallowing, increased cost of care, loss of self-esteem, needless pain, lost work and school days, negative impact on school performance, and overall health being compromised. By recognizing and understanding the oral health needs of Rhode Island's children, policies can be initiated and advanced to ensure that all of our children receive the oral health services they require.

Despite significant improvements in oral health in the U.S., the number of very young children with dental caries (cavities) in their primary teeth has increased. Between 1988 and 1994, 24% of children ages two to five had caries, compared with 28% between 1999 and 2004, an increase of 17%. Between 1999 and 2004, more than half (51%) of children ages six to 11 had dental caries, which is essentially the same as between 1988 and 1994 (50%). In the United States, 80% of the tooth decay occurs in 25% of the children (Source: 2010 Rhode Island KIDS COUNT Factbook).

In Rhode Island, comprehensive dental services are a covered benefit under Medical Assistance. Dental services provided to those enrolled in RIte Care are paid on a fee-for-service basis, where Medical Assistance directly pays dentists who choose to participate in the program. As of September 30, 2009, half (51%) of the

children who were enrolled in RIte Care, RIte Share, or Medicaid fee-for-service received a dental service during Federal Fiscal Year 2009 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Rhode Island's dental benefits management program, Rite Smiles, is for young children who were born on or after May 1, 2000. This program is attributed with the increase in access to dental care for low income children. As of December 31, 2009, there were 45,684 Rhode Island children receiving dental benefits through the RIte Smiles program. The number of dentists accepting qualifying children with Medical Assistance has increased from 27 in 2006 (before Rite Smiles) to 90 (at the launch of RIte Smiles) in September 2006 to 276 in 2009. In 2006, reimbursement rates were also raised for RI dental providers participating in the program (Source: 2010 Rhode Island KIDS COUNT Factbook).

Oral Health Emergency Department Visits and Hospitalizations

Between 2006 and 2008, 881 children under age 21 were treated each year on average for a primary dental-related condition in Rhode Island emergency departments. Nearly half (49%) of these children had public insurance (Medicaid/RIte Care) and 26% had private/commercial health or dental insurance. Nearly one-quarter (23%) were self-pay patients, which could mean that their health or dental insurance did not cover the cost of the emergency department visit or that they were uninsured. The number of children treated for a dental condition at emergency departments increased from 813 in 2006 to 875 in 2007 and 956 in 2008 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Between 2006 and 2008 in Rhode Island, an average of 13 children were hospitalized each year with an oral health condition as the primary reason for the hospitalization, and an average of 56 children under age 19 were hospitalized with a diagnosis that included an oral health condition (Source: 2010 Rhode Island KIDS COUNT Factbook).

Rhode Island Department of Health: Oral Health Survey

During the 2007-2008 school year, the Rhode Island Department of Health, Oral Health Program conducted a statewide oral health survey of third grade children enrolled in Rhode Island's public elementary schools. Screenings were completed at 31 randomly selected elementary schools with 66 percent of all enrolled 3rd grade students in the participating schools.

Survey data indicate that dental decay is a significant public health problem for Rhode Island's children. Some of the key findings of the study indicate that 48 percent of 3rd grade children have decay experience (cavities and/or fillings). Many children in Rhode Island do not get the dental care they need, including one out of four children who have untreated tooth decay and four percent of the children screened needed urgent dental care because of ***pain or infection***. In 2007-2008 there were more than 9,700 3rd grade children in Rhode Island. If 4% are in urgent need of dental care, this means that almost 400 3rd grade children are in the classroom in pain or with an oral infection. If this percentage is extrapolated to all elementary school children (K-6th grade) in Rhode Island, ***more than 2,900 children may need urgent dental care because of pain or infection***. Additionally, more than 60 percent

of children in Rhode Island do not have dental sealants, which is a well accepted clinical intervention to prevent tooth decay on molar teeth.

Survey results also indicate there are significant oral health disparities in Rhode Island with urban children having the highest level of dental disease. In urban schools, four out of ten children have untreated tooth decay compared to two out of ten children in non-urban schools

Rhode Island has not met the Healthy People 2010 objectives for reducing the prevalence of decay experience, untreated tooth decay or increasing the prevalence of dental sealants among elementary school children. It should be noted that even though the majority of children screened were of 8-9 years of age, the Rhode Island Oral Health Survey was not designed to be representative of 6-8 year old children. Forty-eight percent of the Rhode Island children screened had experienced dental decay. This percentage is slightly higher than the HP 2010 objective of 42 percent. Twenty-eight percent of Rhode Island's children had untreated caries compared to the HP 2010 objective of 21 percent. While Rhode Island is close to meeting the two previously mentioned objectives, significant progress must be made if Rhode Island is to meet the dental sealant objective. Only 36 percent of Rhode Island's 3rd graders had dental sealants compared to the HP2010 objective of 50 percent.

Oral Health - National Survey of Children's Health

According to the 2007 National Survey of Children's Health, 79.1% of Rhode Island children had excellent or very good oral health compared with 70.7% of children in the nation. Children in Rhode Island were also more likely to have received a preventive dental visit in the past year (86.5%) compared to children nationwide (78.4%).

Actions to Improve Oral Health in Rhode Island

Ensuring that children have good oral health and access to care can be achieved through a combination of policy solutions that cost relatively little and have large returns on investment. States can improve children's oral health when they implement school-based sealant programs in schools with many high-risk children, fluoridate their community water supplies, and ensure access to care for Medicaid-eligible children. Innovative workforce models can be used to expand the number of dental and medical providers who are able to offer oral health services when dentists are unavailable.

In 2001, a Special Senate Commission on Oral Health issued 22 recommendations, which included the following: enhancement of Medicaid reimbursement for hospital based dental centers; establishment of a collaborative community effort to address barriers to early childhood oral disease; expansion of the Providence Smiles Program; establishment of pediatric and general practice dentistry programs in Rhode Island; and development of alternative models for dental assistant recruitment and training. In response, initiatives have been or are being developed, such as: the Dental Assistant Training Partnership Program; an action plan to guide the Rhode Island Early Childhood Oral Health Coalition; and a public health education campaign regarding the dangers of early childhood tooth decay sponsored by Delta Dental of Rhode Island in partnership with the Rhode Island Department of Health, Rhode Island KIDS COUNT, Neighborhood Health Plan of Rhode Island, and medical and dental providers.

During 2004, Rhode Island KIDS COUNT published an issue brief on "Access to Dental Care for Children in Rhode Island" which included the following recommendations:

- Increase Medicaid funds dedicated to dental services for children
- Implement a Dental Benefits Manager to reduce access barriers and increase accountability for providing comprehensive dental services
- Increase reimbursement rates paid by Medical Assistance for dental and oral health services

The report recommended maintaining the capacity of hospital-based dental centers and community health centers; providing adequate reimbursement rates for private dentists and specialists; implementing recruitment and retention strategies to ensure an adequate dental workforce; and developing local and statewide data systems for access to dental care and oral health.

Rhode Island is making progress in increasing its dental workforce. Funding through the Oral Health Access Project has resulted in two residency programs that graduate six dentists per year starting in 2007.

Homeless Children

Homelessness is of concern since homeless children are more likely to get sick, develop mental health problems, have academic problems, have high rates of school mobility, have higher rates of learning disabilities diagnoses, be victims of violence, or exhibit delinquent and aggressive behavior. Homeless children are more likely to go hungry and experience illnesses such as asthma, stomach problems, and ear infections. Infants, toddlers, and preschoolers who are homeless develop more slowly and may develop serious emotional problems.

Lack of affordable housing, rising unemployment, low-paying jobs, extreme poverty, and decreasing government support programs all contribute to the problem homelessness. Other causes of family homelessness include domestic violence, mental illness, and substance abuse (Source: 2010 Rhode Island KIDS COUNT Factbook). In Rhode Island, from December 2007 to December 2009, the unemployment rate more than doubled from 6.0% to 12.9%. This has contributed to the 5,065 properties in Rhode Island that filed for foreclosure, resulting in many families (both renters and owners) losing their homes (Source: 2010 Rhode Island KIDS COUNT Factbook).

The number of homeless children in Rhode Island increased by 26.2%, from 1,193 in 2007 to 1,506 in 2008. Among these homeless children, 895 (59%) were under the age of six.

On December 31, 2009, there were 69 youth in the care of the Rhode Island Department of Children, Youth and Families (DCYF) who were classified *as unauthorized absences/runaways* (AWOL). Of the 69 AWOL youth, 31 were female and 38 were male. These youth were AWOL from either foster care or juvenile justice placements (Source: 2010 Rhode Island KIDS COUNT Factbook). There were an additional 248 youth ages 13 to 17 who received emergency shelter services with their families in Rhode Island in 2009. These youth are vulnerable to being separated from their families due to shelter or child welfare policies. Sixty single youth ages 18 to 20 and 130 young adults ages 21 to 24 received emergency shelter services though the adult emergency shelter system in Rhode Island in 2009 (Source: 2010 Rhode Island KIDS COUNT Factbook).

In Rhode Island, there is one emergency shelter specifically run to meet the needs of unaccompanied and runaway homeless youth. During Federal Fiscal Year (FFY) 2009, 14 unaccompanied youth ages 12 to 18 received up to 21 days of emergency shelter and five youth ages 17 and 18 received long-term residential and supportive transitional living services by Rhode Island programs funded through the federal Runaway and Homeless Youth Program (Source: 2010 Rhode Island KIDS COUNT Factbook).

Children and Domestic Violence

Research has shown exposure to violence in the home can affect brain development and negatively impact cognitive, social, and academic performance (Source: 2010 Rhode Island KIDS COUNT Factbook). Children who witness domestic violence are more likely to have social, emotional, health, and learning problems; they are more likely to develop depression, anxiety, fear, post-traumatic stress disorder, concentration and memory problems, and difficulty with school performance compared to children who do not witness domestic violence (Source: 2010 Rhode Island KIDS COUNT Factbook).

Between 2004 and 2008 the total number of domestic violence incidents resulting in an arrest decreased from 6,039 to 5,217. The percentage of such incidents with children present remained fairly stable at 32% in 2004 compared to 31% in 2008. According to the 2010 Rhode Island KIDS COUNT Factbook, police reports indicate that in Rhode Island during 2008 children were present during 1,595 (31%) of the 5,217 reported domestic violence incidents that resulted in arrests. Police officers reported that children saw their parent being abused in 1,259 incidents, and children heard their parent being abused in 1,382 incidents resulting in arrests. These incidents were not mutually exclusive.

The actual number of children witnessing incidents of domestic violence is thought to be an under-representation. Many domestic violence incidents are never reported to police. In the U.S. between 1998 and 2002, it is estimated that somewhat more than one-half (59%) of family violence incidents were reported to police. Additionally, police reports are not always fully completed, so even when arrests were made, the data likely under-represent the number of domestic violence incidents in which children were present (Source: 2010 Rhode Island KIDS COUNT Factbook).

In Rhode Island, there are six shelter and advocacy programs that offer services to children who witness domestic violence. Services include group therapy, individual counseling, expressive arts therapy, and child care. In 2009, the six domestic violence agencies provided services to 540 Rhode Island children, 312 (57.8%) of whom spent time in a domestic violence shelter. The shelters also provide service by conducting school-based domestic violence prevention programs (Source: 2010 Rhode Island KIDS COUNT Factbook).

Child Abuse and Neglect

Preventing child abuse and neglect is essential to make sure children grow into strong, healthy, productive adults and good parents. Children are at increased risk for abuse and neglect if their parents or caregivers are overwhelmed by multiple stressors such as inadequate income, family problems, isolation from extended family or social networks, drug and/or alcohol abuse, or depression (Source: 2010 Rhode Island KIDS COUNT Factbook).

Some of the immediate effects of child maltreatment include social isolation, fear, inability to trust, injury, and in some cases, death. Child abuse and neglect can also lead to low academic achievement, juvenile delinquency, substance abuse, mental health problems, and teen pregnancy. As children move through the life course to become adults, child victims are more likely to experience domestic violence and to abuse and neglect their own children, thus perpetuating the cycle of abuse (Source: 2010 Rhode Island KIDS COUNT Factbook).

The Rhode Island Department of Children, Youth and Families (DCYF) has reported that during 2009, there were 2,075 indicated cases of child abuse and/or neglect, representing an 8.2% decrease since 2005, when there were 2,260 indicated cases. Cases can involve more than one child, and in 2009, the 2,075 indicated cases involved 2,962 children, of whom 10% were under age 1, 37% aged 1-5, 31% aged 6-11, and 22% aged 12 or older. More than three-quarters (78%) of the cases are for neglect, 13% are for physical abuse, 4% are for sexual abuse, 1% are for medical neglect, 1% are for emotional abuse, and 4% are for other types of abuse. In 93% of cases, parents were the perpetrators, 3% were relatives or household members, 3% were foster parents or residential facility staff, 1% were child care providers, and 1% had other relationships to the victims (Source: 2010 Rhode Island KIDS COUNT Factbook).

The rate of child abuse and neglect among children aged less than 18 in Rhode Island during 2009 was 11.7 per 1,000, where 2,075 children were the victims of child abuse/neglect. The rate of child abuse and neglect among children living in the core cities (17.4) was more than twice the rate among children living in the rest of the state (8.3) (Source: 2010 Rhode Island KIDS COUNT Factbook).

Child Abuse and Neglect Hospitalizations

During 2008, 31 children were hospitalized with the diagnosis of child abuse and neglect, compared with 32 in 2006, 34 in 2005, and 22 in 2004. Between 2000 and 2009, 23 children died as a result of injuries due to abuse by a parent or caretaker (Source: 2010 Rhode Island KIDS COUNT Factbook).

Child Neglect

Of the 2,075 indicated allegations (confirmed claims) of child neglect in Rhode Island during 2009, 37% involved lack of supervision, illustrating the importance of adequate child care and early childhood and school age programs. Additionally, of the indicated allegations in 2009, 2% were for inadequate food, clothing or shelter; 2% were for neglect resulting in physical injuries/death; 1% was for medical neglect; 1% was for drug/alcohol abuse; and 55% were for unspecified other categories (Source: 2010 Rhode Island KIDS COUNT Factbook).

Child Sexual Abuse

In Rhode Island during 2009, there were 170 indicated allegations of sexual abuse, and of these, 130 (76.0%) were among females, and just over half (52%) of whom were among children aged less than 12 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Geographic Disparities

During 2009, the rate of cases of child abuse/neglect per 1,000 children in Rhode Island was 11.7. However, the rate among children residing in the core cities was 17.4, twice the rate for children residing in the rest of the state (8.3). The rate of child abuse/neglect ranged from a low of 0.8 in Jamestown to a high of 26.6 in Woonsocket. Among the core cities, Providence had the lowest child abuse/neglect rate (14.1). More than half, 1,094 (52.7%) of the 2,075 child abuse/neglect cases in Rhode Island during 2009 were among children living in the core cities.

Families that become overwhelmed by personal, social, or economic problems may not have adequate resources to meet their children's needs and may require a variety of services and interventions. It is critical that families are connected with economic supports and have access to mental health services in order to help prevent child abuse and neglect.

Children's Mental Health

Mental health problems affect children of all backgrounds and can arise from biological or psychosocial causes. However, children are at increased risk if they live in poverty, experience child abuse/neglect or were exposed to alcohol or drugs during the prenatal period.

Data from the 2007 National Survey of Children's Health indicate that approximately one out of 13 (7.6%) Rhode Island children aged less than 18 have an emotional, developmental or behavioral problem for which they need treatment or counseling. Although a higher proportion of Rhode Island children with emotional, developmental or behavioral problems received some type of mental health care (76.0%) than children nationally (60.0%), one-quarter of Rhode Island children in need of mental health care are not receiving services. 8.3% of respondents with children 8 to 17 years of age indicated that a doctor or health professional diagnosed their child with anxiety problems (compared to 4.5% nationally); 9.9% were told their child has attention deficit disorder or attention deficit hyperactive disorder; 5.0% were told their child has behavioral or conduct problems; and, 4.3% were diagnosed with depression.

Mental Health Care: Community Mental Health Centers

According the 2010 Rhode Island KIDS COUNT Factbook, during 2009, 7,929 children received services from the eight community mental health centers (CMHCs) in Rhode Island, which are the primary source of public mental health treatment services available in the state. One in five (20%) of the children receiving CMHC services had attention deficit disorder, 17% had depressive disorders, 12% had conduct disorders and 12% had anxiety disorders.

Mental Health Care: Hospitals (Inpatient and Outpatient Care)

Bradley and Butler Hospitals

The two hospitals in Rhode Island that specialize in providing psychiatric care to children and youth are Bradley Hospital and Butler Hospital**.** During 2009, 1,135 children under age 19 were admitted to Bradley Hospital for inpatient general psychiatric services, compared to 700 in 2006, representing a 62% increase. Additionally, in 2009, there were 129 children under age 19 admitted as an inpatient to the Developmental Disabilities Program,

which is a treatment program that offers highly specialized clinical services to children and adolescents who show signs of serious emotional and behavioral problems in addition to developmental disabilities. Bradley served approximately 237 students with behavioral health problems and developmental disabilities per day in 2009. Butler Hospital, which provides a wide range of psychiatric services to children and adolescents, treated 485 children aged 18 and under during 2009. These hospitals also provided 2,205 outpatient services to youth (Source: 2010 Rhode Island KIDS COUNT Factbook).

Rhode Island/Hasbro Children's Hospital

Hasbro Children's Hospital (a division of Rhode Island Hospital) provided 7,555 outpatient psychiatry visits to 1,773 children and youth under age 19 in 2008 (Source: 2009 Rhode Island KIDS COUNT Factbook).

Diagnoses

In 2009, 1,846 children aged less than 19 were admitted to Bradley or Butler Hospital for inpatient psychiatric treatment. At Bradley Hospital, the most common diagnoses for young people treated in an inpatient setting were bipolar disorders (39%), depressive disorders (24%), anxiety disorders (18%), and adjustment disorders (14%). At Butler Hospital the most common disorders were bipolar disorders (45%), depressive disorders (35%), anxiety disorders (7%), and child/adolescent disorders (6%) (Source: 2010 Rhode Island KIDS COUNT Factbook)

Mental Health Care: Children's Intensive Services and Home Based Therapeutic Services

The Child and Adolescent Intensive Treatment Services (CAITS) replaced the Children's Intensive Services (CIS) Program at the Rhode Island Department of Children, Youth and Families (DCYF). The program is administered by the Department of Human Services under RIte Care and is designed to reduce inpatient psychiatric hospitalizations and residential treatment services to children and youth at risk or experiencing moderate to severe emotional or behavioral problems. CAITS provides up to 16 weeks of intensive, home- and community-based treatment for RIte Care eligible children and youth by means of individual and/or family therapy, family training, and support worker services per year. During 2009, 2,283 children received services, representing a slight decrease of 28% from 3,189 children served by CIS in 2007 (Source: 2010 Rhode Island KIDS COUNT Factbook).

Mental Health Care: Access to Services

There are waiting lists for many mental health services for children and families in Rhode Island. In 2009, approximately 122 children between the ages of 4-17 with a psychiatric diagnosis were "boarded" in emergency departments and/or medical floors at hospitals throughout Rhode Island due to the unavailability of inpatient child psychiatric beds in the state (Source: 2010 Rhode Island KIDS COUNT Factbook).

Mental health issues among adolescents are discussed later in Section 3b. *Adolescents*.

Protective Factors/Assets

National studies have shown that assets such as family support, caring neighborhoods, school engagement, parent involvement, adult role models, self-esteem, youth programs, etc. can impact whether a child engages in substance abuse and other risky behaviors.

Data from the 2007 National Survey of Children's Health indicate that more than half (58.2%) of those surveyed stated they or family members read aloud to their children (aged less than six) everyday in the past week; 65.7% were sung to or told stories every day in the past week; and 13.3% went with family member(s) to a park, library, zoo, shopping, church, restaurant, family gathering or other place everyday during the past week. More than half (57.3%) of the children (6-17 years of age) always cared about doing well in school and always did all required homework during the previous month. The majority (86.0%) of children in this age group participated in organized activities outside of school during the past 12 months, while fewer (12.6%) spend one hour or more reading for pleasure on an average weekday. Less than half of these children (40.7%) ate a meal together everyday during the previous week with their families.

Respondents definitely or somewhat agreed with the following about their neighborhood: people in their neighborhood are supportive, trustworthy, and helpful (81.3%); their neighborhood is safe (85.9%); and neighbors help each other out (85.1%). In terms of safety, 85.9% of respondents always or usually feel their child is safe in their community or neighborhood, and 90.9% always or usually feel their child is safe at school.

Parenting Issues

The majority (88.6%) of parents responding to the 2007 National Survey of Children's Health said they had someone they could turn to for day-to-day emotional help with parenthood/raising children. Although 73.3% stated their mental and emotional health is excellent or very good, 7.3% stated their mental and emotional health was fair or poor. Nearly one in ten (9.9%) respondents stated that during the past month, they always or usually felt their child is much harder to care for than other children, bothered a lot by things the child does, and/or angry with the child.

Maternal Depression

During 2009, more than one out of five (21.3%) Toddler Wellness Overview Survey (TWOS) respondents indicated that in the past 12 months, they had felt sad, blue or depressed, or lost pleasure in things that they usually cared about or enjoyed for two or more weeks in a row. Approximately one out of seven respondents (14.2%) reported they had been diagnosed with depression in the past 12 months; 11.7% had taken prescription medication for depression; and 9.4% had received counseling for their depression. In terms of the demands of raising children, 5.8% of TWOS respondents indicated they always or usually felt overwhelmed by the demands of their children in the past year.

2009 data from TWOS also indicate that mothers of toddlers experience many stresses while raising their children. For example, nearly one in three (30.8%) respondents indicated they had a close family member or friend who was very sick or died in the past year. Approximately one in five (20.9%) reported that during the past 12 months, they had a lot of bills they could not pay. Almost one in ten (8.2%) stated that someone close to them had a problem with drinking or drugs during the past year. TWOS respondents also reported whether the following had

happened during the past year: their husband/partner had lost their job (10.5%), they themselves had lost their job (7.1%), they were very sick (9.2%), or they were without a telephone (3.8%).

Foster Care

2009 data from the Department of Children, Youth and Families (DCYF) indicate that there were 2,331 children in out-of-home placements. This represents a 29.6% decrease in the number of out-of-home placements from 2006 where there were 3,311 placements. Of 2,331 children placed out of the home in 2009, there were 1,201 children in foster homes, 478 (39.8%) were in relative foster homes and 60.2% were in non-relative, or private agency foster care homes.

Grandparents and Other Relatives Caring for Children

In 2008 the federal Fostering Connections to Success and Increasing Adoptions Action Act became a law helping children and youth in foster care establish permanent families through subsidized guardianship and adoption. Rhode Island was the first state to be granted approval for this program which allows family members and grandparents to establish permanent homes for these children. Rhode Island regulations state that the Division of Children, Youth, and Families (DCYF) are to give priority placement to relatives for out-of-home placements. In December 2009, 25% (568) of children were in out-of-home placements with a grandparent or relative (Source: 2010 Rhode Island KIDS COUNT Factbook). This reflects a growing reliance among child welfare agencies on family members to act as caregivers and foster parents. Placements with relatives may be on a temporary basis or may become a permanent living arrangement. Studies have shown that children do better when they are able to live with relatives who care about them and with whom they feel safe. Data from the American Community Survey conducted by the U.S. Census indicate that in Rhode Island between 2006-2008, there were 11,758 grandparents living with their grandchildren. Of these, 5,009 (44%) grandparents were financially responsible for the children's needs for three or more years.

Children of Incarcerated Parents

In Rhode Island during 2009, 1,774 incarcerated parents reported having 3,889 children. Of the 83 women with children, 37% were serving a sentence for nonviolent offenses, 30% for violent offenses, 20% for drug offenses, 11% for breaking and entering, and 1% for sex-related offenses. Among the 1,323 sentenced men with children, 42% were serving sentences for violent offenses, 19% for drug offenses, 15% for nonviolent offenses, 15% for sex offenses, and 9% for breaking and entering. Children residing in the core cities were nearly four times more likely to have an incarcerated parent (18.8 per 1,000) compared with children in the rest of the state (5.1) (Source: 2010 Rhode Island KIDS COUNT Factbook).

School-based Health Services

All schools are required by Rhode Island General Laws to have ”a comprehensive school health program consisting of health education, health services and a healthful school environment.” Further, ”each, community, school district and appropriate non-public school authority shall be responsible for a comprehensive school health program and shall develop a manual of procedures governing health education, health services and a healthful school environment.”

School districts are responsible for ensuring that children have specific health screening and exams to help ensure readiness for learning and immunizations necessary to protect public health. Schools are also responsible for providing general population based services to private schools in their district, such as the documentation of physical exam and immunization requirements, as well as providing health screenings, when appropriate.

Certified school nurse teachers carry out these responsibilities in schools throughout Rhode Island. School leaders rely on the clinical and education expertise of the certified school nurse teachers to assist in the development of the comprehensive school health program required by Rhode Island State Law. Certified school nurse teachers hold certification by the state Department of Elementary and Secondary Education and are licensed as registered nurses by the Rhode Island Department of Health. Certified school nurse teachers provide a myriad of public health and education services for students, school staff, and families.

Since Rhode Island is committed to improved academic outcomes for all kids, then we must all contribute to the support and resources needed to help each student achieve their optimum level of participation in the educational process. The Rhode Island Departments of Education and Health, the Rhode Island Association of Certified School Nurse Teachers, and other organizations and agencies throughout the state work together to provide professional development opportunities, technical assistance, on-line resources, and other supports to assist school nurses in this critical role. School district policies and protocols, staffing and resource allocation, strategic plans, and facilities need to align with this basic understanding that healthy kids learn better.

Child Deaths

Recent declines in the U.S. child death rate are likely a result of increased parental education about the effective use of safety products such as seat belts and car seats, better child safety laws such as requiring residential smoke detectors and window guards, and better product safety labeling (Source: 2010 Rhode Island KIDS COUNT Factbook).

Rhode Island’s national ranking for the child death rate improved to 9th (1st being the best, based on the Annie E. Casey Foundation’s KIDS COUNT Data Book: State Profiles in Child Well-Being. This ranking is based on 2006 data when Rhode Island’s child death rate was 16 per 100,000.). During 2004-2008, there were 124 (13.7 per 100,000) deaths among Rhode Island children aged 1-14. Seventy, or more than half (56%) of these deaths were among children who lived in the core cities. Among the total number of child deaths, 83 (67%) were due to diseases, 26 (21%) were due to unintentional injuries, eight (6%) were due to intentional injuries (7 homicides and one suicide), and six (5%) were due to unknown causes

The leading causes of child injury deaths are motor vehicle crashes and drowning. Evidence-based interventions that have proven to reduce child injury include child-restraint and helmet laws, reduced speed limits, and requirement of four-sided fencing around swimming pools. Between 2004 and 2008, 35 children died as a result of injury. Motor vehicle injuries were the leading cause of child deaths due to injury (29%) in Rhode Island. Nationally, half of the children under age 15 who died in motor vehicle collisions were not wearing a seat belt or other restraint (Health Department Data).

3D. ADOLESCENTS

Adolescent Medical Home

Although adolescence in general is a period of overall good health, it is also a period of high risk taking behavior. This paradox has created disparities within the health care system particularly among racial and ethnic minority adolescents (The National Academies, 2008). Adolescents have morbidity and mortality rates twice that of younger children (National Center for Health Statistics, 2007). In Rhode Island, adolescents aged 10-17 comprise 45% of the child-hood population (Source: 2009 Rhode Island KIDS COUNT) Health plans in Rhode Island report HEDIS measures including adolescent well child visits for their enrolled populations.

National research demonstrates that whether patients are privately insured, publicly insured, or uninsured, reimbursement rates usually do not cover the full cost of care. Both private and public insurance programs are not structured to support integrated primary care services for adolescents. Adolescents are underserved in Medicaid because payment policies discourage preventive counseling. This information further underscores the need to support health insurance for adolescents as well as venues where adolescents can access care designed to address their developmental needs. Studies have demonstrated that providing health insurance in and of itself does not increase access to care for adolescents. Visionary and collaborative approaches can help ensure successful medical home models for adolescence to address their developmental needs.

According to the National Center for Medical Homes Implementation, every child deserves a medical home. The American Academy of Pediatrics (AAP) describes the medical home as a model of delivering primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective. Over the past year the AAP has been at the forefront of numerous initiatives to promote the adoption and spread of the patient-centered medical home.

In March 2007, the AAP joined with the American Academy of Family Physicians (AAFP), American College of Physicians (ACP), and the American Osteopathic Association (AOA) to publish the Joint Principles of the Patient-Centered Medical Home.

During 2006, the Rhode Island Department of Health created an Adolescent Medical Home Group to identify issues specific to adolescents accessing health care and define a “medical home” for teens. Data from the 2007 National Survey of Children’s Health indicate that 62.2% of Rhode Island adolescents aged 12-17 had a medical home. The medical home rate determined by the 2007 survey show that a higher proportion of Rhode Island adolescents have a medical home compared to those nationwide (53.4%). Teens were less likely to have a medical home than children aged less than 6 (67.0%) and slightly more likely than children aged 6-11 (61.7%).

Teen Risk Behaviors

Alcohol, Drugs and Cigarettes

Substance use and/or abuse of alcohol, tobacco, and other drugs by children and youth poses health and safety risks not only to those who use them but also to their families, schools, and communities. Rhode Island ranks

among the states with the highest percentages of adolescents and adults reporting use of illicit drugs and alcohol (Source: 2010 Rhode Island KIDS COUNT Factbook).

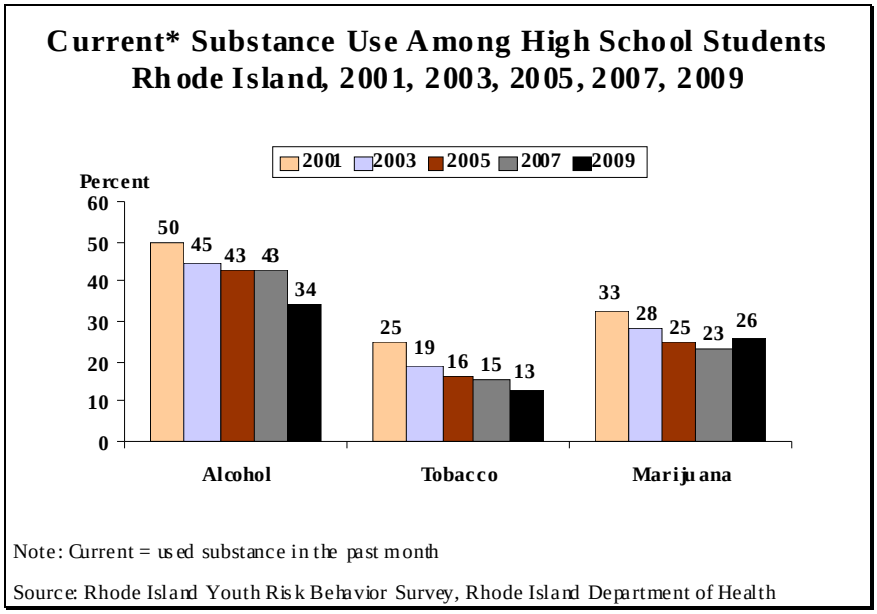
Research shows that children and youth are at highest risk for alcohol, cigarette, and other drug abuse during major transitions in children's lives. These include major transitions to middle school and high school where there are new academic, social, and emotional challenges. There is greater exposure to drugs, to peers who abuse substances, and to social activities involving drugs and alcohol at the high school level (Source: 2010 Rhode Island KIDS COUNT Factbook).

Nationally, approximately one in 10 adolescents meet standard diagnostic criteria indicating the need for treatment for an illicit drug use problem; however, only one in 14 in need actually receive specialty treatment. This on-going trend indicates a need to expand the continuum of care for increased access to specialty treatment programs (Source: 2010 Rhode Island KIDS COUNT Factbook).

According to the 2009 Rhode Island Youth Risk Behavior Survey (YRBS), 39.9% of high school students reported ever having used marijuana and 8.3% of high school student reported ever using marijuana prior to the age 13. Nearly one in ten (8.7%) high school students in 2009 reported ever using inhalants (sniffing glue, breathing the contents of an aerosol spray can, and/or inhaling paints or sprays), 5.9% reported ever using ecstasy, and 5.4% reported ever using any form of cocaine.

Data from the YRBS also indicate that substance abuse among high school students has declined during 2001-2009 (Figure 67). The one exception in the data shows a 13.4% increase in students who report smoking marijuana within the past 30 days between the 2007 and 2009 surveys, up from 23.2% to 26.3%, respectively. However, the overall trend in marijuana use (past 30 days) among high school students between 2001 and 2009 shows a 20.8% decrease, from 33.2% in 2001 to 26.3% in 2009. Between 2001 and 2009, the percentage of students surveyed who reported they had drunk alcohol in the past 30 days decreased by 32.4%, from 50.3% to 34.0%. A sharper decline of 46.4% was seen in tobacco use, where 13.3% of students reported they had smoked cigarettes in the past 30 days on the 2009 survey compared to 24.8% on the 2001 survey.

Figure 67



For the first time in 2007, the Rhode Island YRBS survey was administered to middle school students (grades 6-8). Data show that 4.1% of students currently (in the past 30 days) smoked cigarettes; 27.8% ever had a drink of alcohol (other than a few sips); and 10.0% had ever used marijuana. Data for 2009 show that 5.0% of students currently (in the past 30 days) smoked cigarettes; 26.0% ever had a drink of alcohol; and 10.2% had ever used marijuana.

Data from the 2006-2007 School Accountability for Learning and Teaching (SALT) survey indicate that 17% of middle school students and 42% of high school students reported they used alcohol in the past month; 8% of middle school students and 27% of high school students reported having used drugs in the past month; and 8% of middle school students and 22% of high school students reported smoking cigarettes in the past month. Rates of substance use among middle school students living in the core cities were higher compared to rates among middle school students living in the rest of the state. However, rates among high school students living in the core cities were lower than rates among high school students living in the rest of the state (Figures 68 and 69).

Data from the 2007-2008 SALT survey indicate a decrease in alcohol consumption among high school (38%) and middle school (27%) students. Substance use continues be lower among core cities in Rhode Island than the rest of the state among high school students, but it remains higher among middle school students.

Figure 68

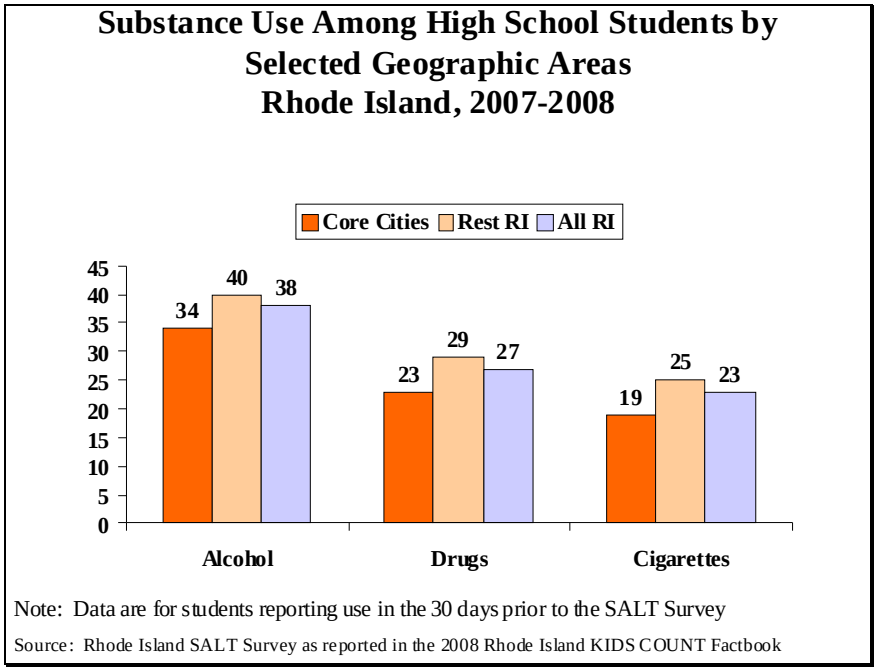
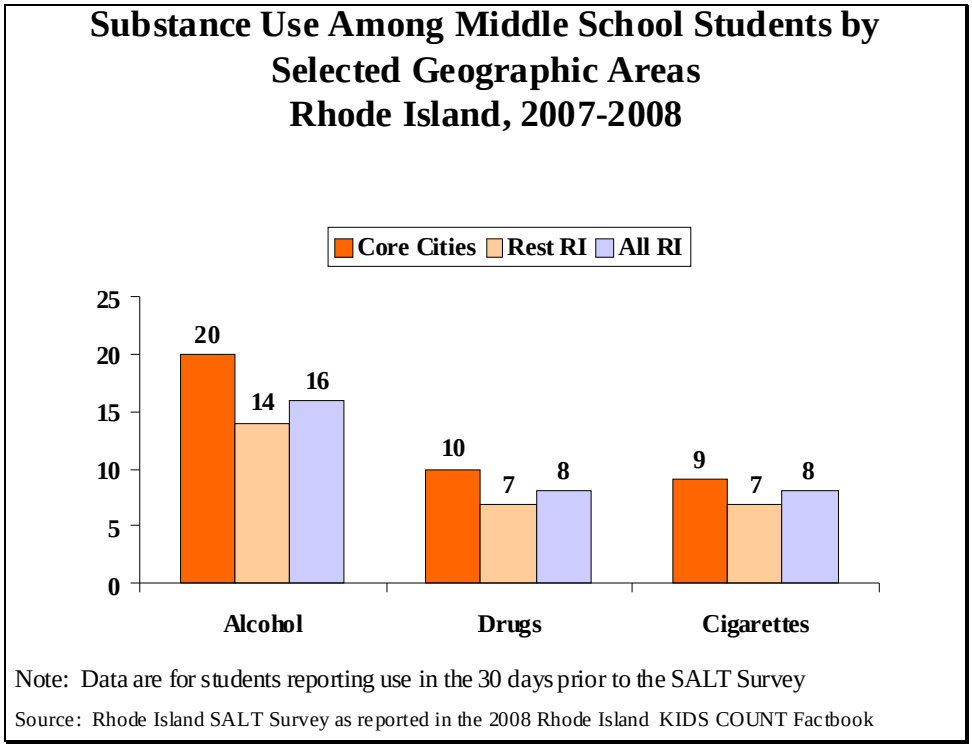


Figure 69



Sexual Behavior

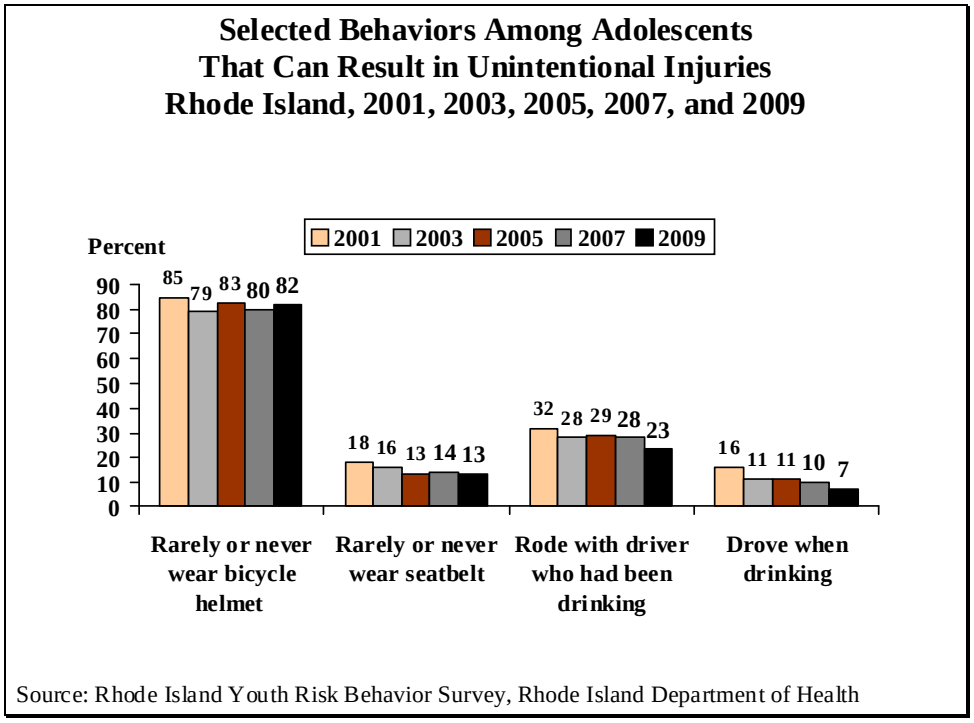
High school students (grades 9-12) are not only taking risks in the areas of tobacco, alcohol, and drugs, but they are also taking risks with sexual intercourse and behaviors that may result in unintentional and intentional injuries. According to the 2009 YRBS, 45.6% of respondents indicated they had sexual intercourse. Of the students who had sexual intercourse in the past three months, 68.2% reported they had used a condom. This represents a 22.2% increase from 1997, when 52.4% reported condom use. Additionally, among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used illicit drugs before the last time the had sexual intercourse was 20.5%, down 44% from 2001 when 36.6% reported using alcohol or drugs prior to intercourse.

Behaviors Related to Unintentional Injuries

Figure 70 summarizes the responses to YRBS questions pertaining to behaviors that result in unintentional injuries, such as bicycle helmet use, seatbelt use, riding with a driver that has been drinking alcohol, and driving a car when drinking alcohol. Data from the 2009 YRBS indicate that the percentage of students who never or rarely wear a bicycle helmet increased to 82.1% from 80.4% in 2007. However, seatbelt use decreased slightly, where 13.1% of students reported that they rarely or never wore a seatbelt. This represents an increase from the 2005 figure of 12.5%; however, it was still down from 13.7% in 2007. The percentage of students who reported they rode in a car driven by someone who had been drinking alcohol decreased to 23.1%, and the percentage of students who reported they had driven a car while they had been drinking alcohol decreased to 7.2%.

According to the 2009 YRBS middle school survey, 62.3% of students in grades 6-8 reported they never or rarely wore a bicycle helmet (among students who rode a bicycle); 9.0% never or rarely wore a seatbelt when riding in a car; and 24.3% ever rode in a car driven by someone who had been drinking alcohol.

Figure 70



Violence among Adolescents

Youth violence refers to a range of negative behaviors that youth can experience as victims, witnesses, or offenders that can cause emotional harm, injury, disability, or even death. Violence and the threat of violence can impact the well-being of youth, families, schools, and communities (Source: 2010 Rhode Island KIDS COUNT Factbook).

Nationally in 2008, almost two-thirds (61%) of children under age 18 reported being exposed to violence as a victim or witness during the previous year, almost one in five (19%) youth ages 14 to 17 reported being injured by a physical assault in the previous year, and 71% of youth reported having ever been assaulted (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2008, juveniles made up 16% of all serious violent crime arrests in the U.S. The 2008 Rhode Island juvenile arrest rate for serious violent crimes was 186 per 100,000 youth ages 10 to 17, compared to the U.S. rate of 306 per 100,000 youth. During 2008, there were 814 juvenile arrests for assault offenses and 161 juvenile arrests for weapons offenses. In 2009, violent crimes made up 5% (359) of the 7,829 juvenile offenses referred to Rhode Island Family Court (Source: 2010 Rhode Island KIDS COUNT Factbook).

Data from the 2009 YRBS (Figure 71) indicate the percentage of students who were in a physical fight during the past year declined to 25.1%, and the percentage of students who reported they carried a weapon in the past month (10.4%) also decreased. The percentage of students who reported they had been threatened or injured with a weapon on school property decreased to 6.5%, while the percentage of students who reported they did not go to school because they felt unsafe increased to 7.4%. It should also be noted that the percentage of students

reporting having ever been physically hurt by a boyfriend or girlfriend in the past year decreased to 10.8% after a high of 14.0% in 2007 (Figure 72). Additionally, 7.1% of students reported they had ever been physically forced to have sexual intercourse when they did not want to, down from a high of 10.1% in 2007.

Figure 71

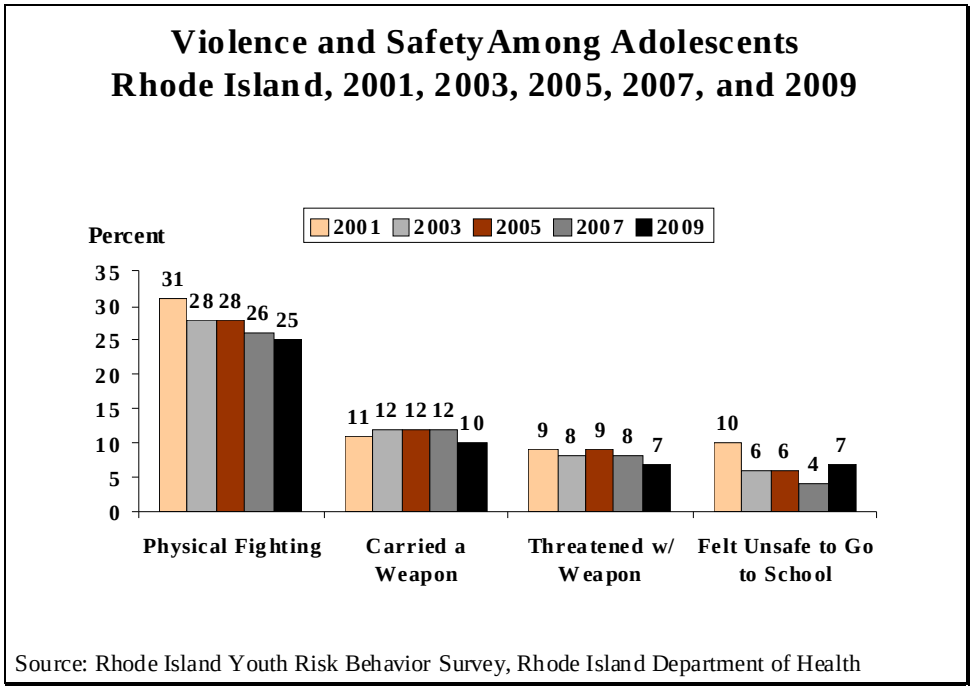
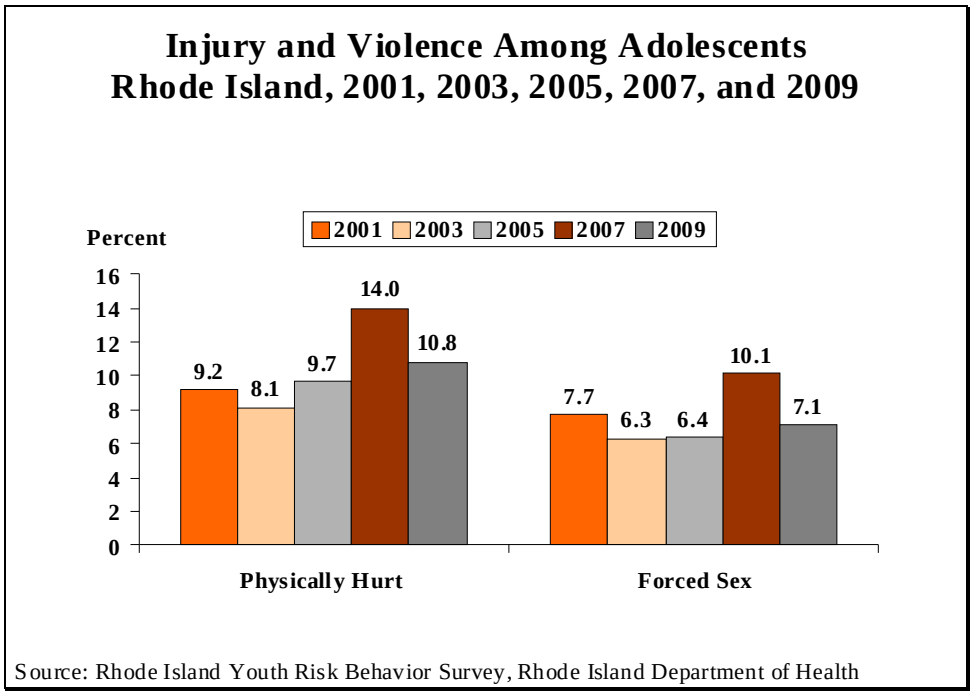


Figure 72



Mental Health Issues among Adolescents

Mental health in childhood and adolescence is fundamentally important to health and well-being. It is defined as "the achievement of expected developmental, cognitive, social and emotional milestones and by secure attachments, satisfying social relationships and effective coping skills." In Rhode Island, one in five children ages six to 17 has a diagnosable mental or addictive disorder; one in ten is functionally impaired (Source: 2010 Rhode Island KIDS COUNT Factbook).

Behavioral and mental health problems affect children of all backgrounds. Children most at risk for mental disorders are those with prenatal exposure to alcohol, tobacco, and other drugs; children born with low birth weight, difficult temperament, or an inherited predisposition to a mental disorder; children living in poverty; those suffering abuse and neglect; children exposed to traumatic events; and children of parents with a mental health disorder (Source: 2010 Rhode Island KIDS COUNT Factbook).

According to the 2009 Rhode Island Youth Risk Behavior Survey, approximately one out of four adolescents (25.0%) report they have felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. However, the percentage of high school students who seriously considered attempting suicide during the past 12 months has been decreasing. In 2001, 16.5% of YRBS respondents reported they had considered suicide compared with 11.8% in 2009. The percentage of respondents who attempted suicide declined by 5% from 8.1% in 2001 to 7.7% in 2009 (Figure 73).

Figure 73

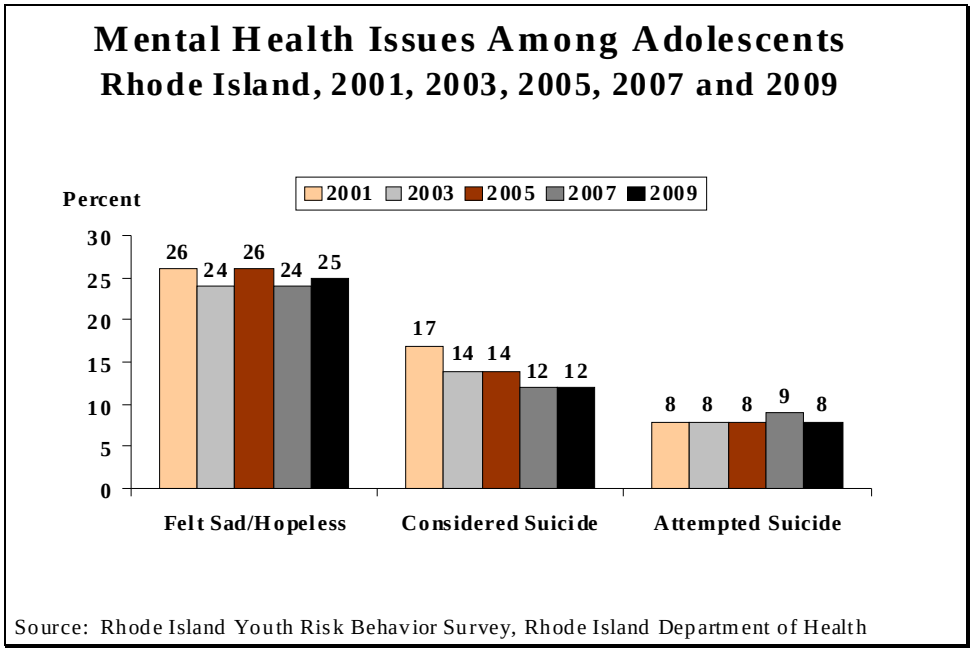
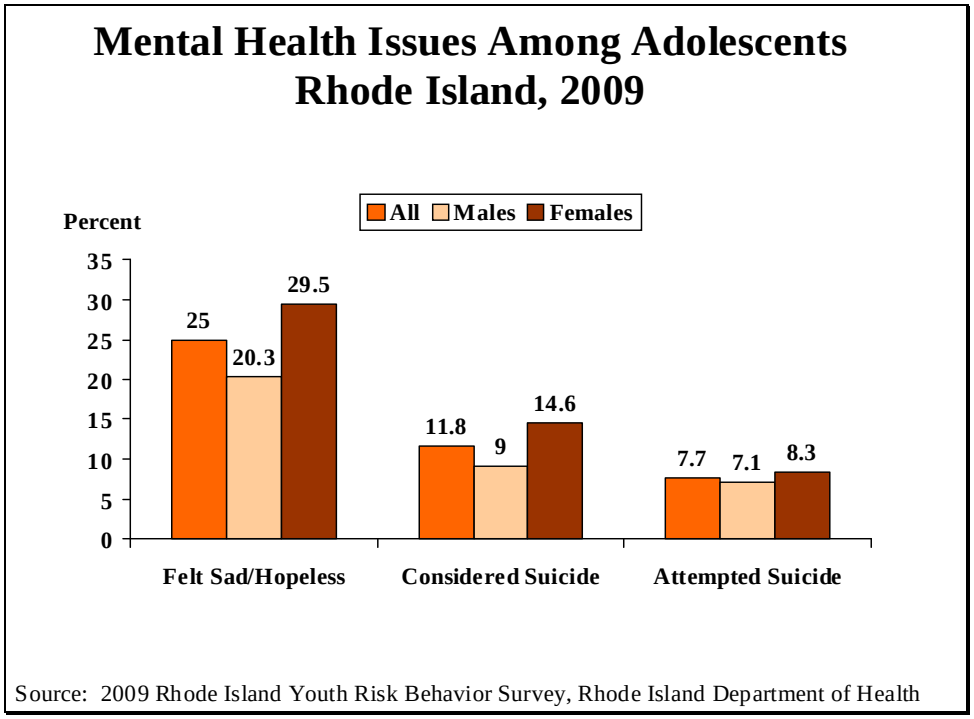


Figure 74 reflects the differences among male and female adolescents regarding feeling sad or hopeless, considering suicide, and attempting suicide. YRBS data indicate that higher percentages of female respondents reported having these feelings compared to their male counterparts. In 2009, 29.5% of female YRBS respondents

reported feeling sad or hopeless compared to 20.3% of males; 14.6% of females had considered suicide compared with 9.0% of males; and approximately one in twelve (8.3%) females had attempted suicide in the past 12 months compared with 7.1% of males.

Figure 74



Source: 2009 Rhode Island Youth Risk Behavior Survey, Rhode Island Department of Health

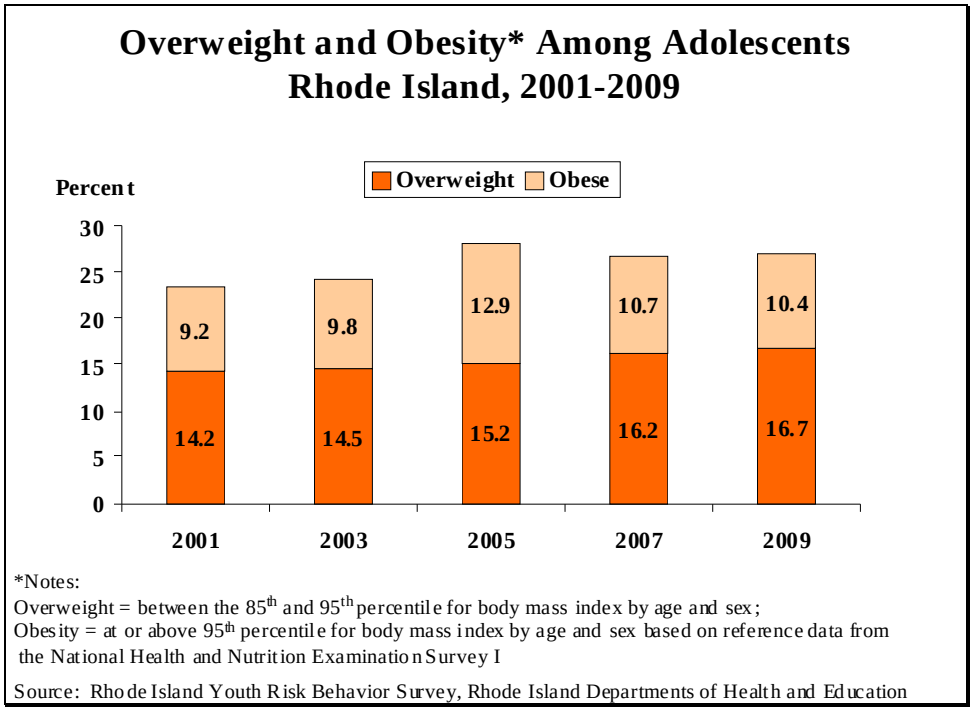
Obesity and Adolescents

Children and adolescents who are overweight and obese are at increased risk for type 2 diabetes, asthma, heart disease, and other acute and chronic health problems throughout the life course. Aside from obesity's physical consequences, obese children and youth are susceptible to mental health and psychological conditions such as depression and low self-esteem, and they may experience social stigmatization and discrimination.

In Rhode Island in 2007, 14.4% of children ages 10 to 17 were obese, and 15.8% were overweight. In the U.S. in 2007, 16.4% of children ages 10 to 17 were obese and 15.3% were overweight, with significant disparities for racial and ethnic minorities. Nationwide, 41.1% of Black children and 41.0% of Hispanic children ages 10 to 17 were overweight or obese in 2007, compared to 26.8% of White, non-Hispanic children (Source: 2010 Rhode Island KIDS COUNT Factbook).

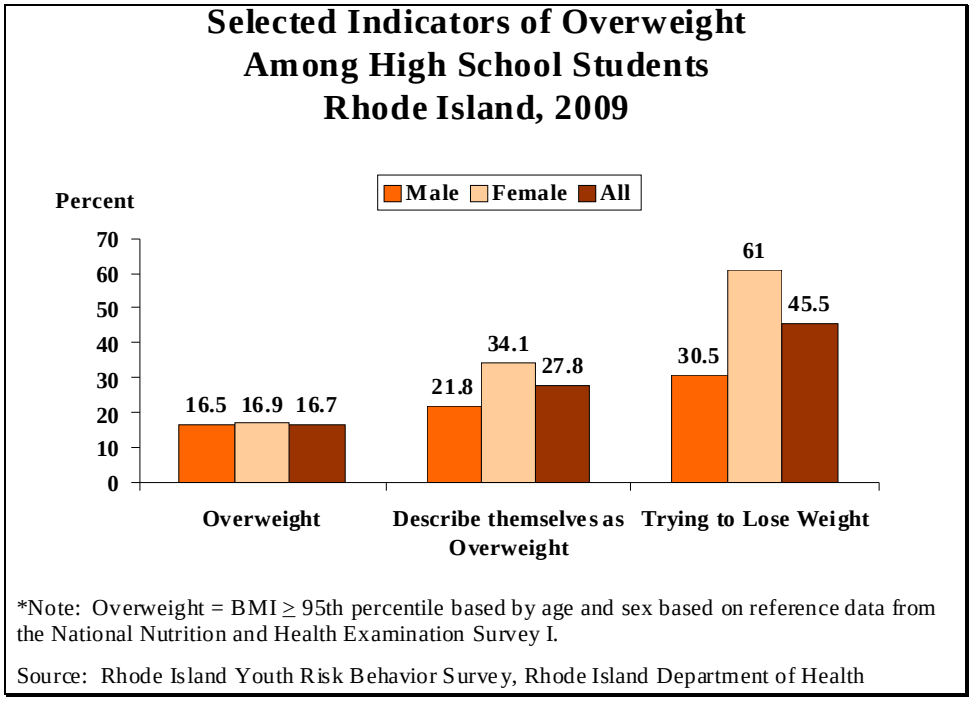
According to the 2009 YRBS, the percentage of high school students who were obese (i.e. at or above the 95th percentile for body mass index, by age and gender) decreased to 10.4%, while the percentage that were overweight (between the 85th percentile and the 95th percentile for BMI by age and gender) rose to 16.7% (Figure 75) Teenagers who are obese have an 80% chance of being obese as an adult (Source: 2010 Rhode Island KIDS COUNT Factbook).

Figure 75



Based on reported heights and weights from 2009 YRBS data, males were one and a half times as likely to be obese (12.4%) than females (8.2%); similar percentages of males and females were overweight, 16.5% and 16.9%, respectively. However, females were more likely to describe themselves as overweight (34.1%) compared to males (21.8%). Female students were also twice as likely to report they were trying to lose weight (61.0%) compared to their male counterparts (30.5%) (Figure 76).

Figure 76



Data from the 2009 YRBS indicate that 44.0% of high school students in Rhode Island participated in vigorous activity compared to 29.1% who watched three or more hours per day of TV on an average school day. Twenty-eight percent also reported using computers for non-school work three or more hours on an average school day. Rhode Island public high school students reported eating increased amounts of fruits and vegetables between 2007 and 2009, but only one in eight (13%) reported drinking recommended amounts of milk daily in 2009.

Sexually Transmitted Diseases (STDs)

Chlamydia

During 2004, the chlamydia rate for all teens aged 15-19 (male and female) was 14.2 per 1,000. The rate among females (23.5) was 4.6 times that for males (5.1). The chlamydia rate among teens increased between 2000 and 2004, the rate rose by 16.3%, from 12.2 to 14.2. Although rates are higher among females, the chlamydia rate rose more sharply among males (28.1%) than females (13.6%). Specifically, during 2000, there were 152 cases (3.9 per 1,000) among males and 771 cases (20.1 per 1,000) among females. By 2004, these figures increased to 195 cases (5.1 per 1,000) and 876 cases (23.5 per 1,000) for males and females, respectively.

Data for 2008 indicate that the number of cases of Chlamydia among teens aged 15-19 remained level at 916 cases among males and 2,399 cases among females compared to 2007 data where there were 892 cases among males and 2,282 among females. The number of cases (2,399) and rate of Chlamydia among female teens ages 15-19 (22.2 per 1,000) decreased slightly (4.3%) from 2005, when there were 873 cases and a rate of 23.2.

Gonorrhea

Between 2000 and 2004, the number of cases of gonorrhea among Rhode Island teens aged 15-19 decreased slightly, from 206 (27.3 per 10,000) to 197 (26.1 per 10,000), a 4.4% decrease. Rates are three times higher among females than males; during 2004, the gonorrhea rate was 39.5 among females and 13.1 among males. The number of case of gonorrhea among teens aged 15-19 continued to decrease in 2005, with 29 cases among males and 73 among females.

Data for 2008 show that there were 71 cases of gonorrhea among Rhode Island teens aged 15-19, or a rate of 8.8 (per 10,000). Rates are 1.7 times higher among females than males; during 2008, the gonorrhea rate was 11.1 among females and 6.7 among males.

Teen Family Planning

The Family Planning Program provides affordable, confidential family planning and related preventive health services in accordance with nationally recognized standards where evidence exists that these services should lead to improvement in the overall health of individuals with a priority for services to low-income individuals. The program expands access to a broad range of acceptable and effective family planning methods and related preventive health services that include HIV counseling, testing, and referral services and services for adolescents, including adolescent abstinence counseling.

The broad range of services provided does not include abortion as a method of family planning. With respect to adolescent clients, the program encourages participation of families, parents, and legal guardians in the decision of adolescents to seek family planning services and provides adolescents with counseling on how to resist attempts to coerce them into engaging in sexual activities. The program also assures compliance with state laws requiring the reporting of child abuse, child molestation, sexual abuse, rape, and incest.

According to Rhode Island Department of Health Program data, in 2008, the Family Planning Program served 2,677 adolescents less than 18 years of age. Of the 2,677 adolescents served, 73% were females and 24% were males. Twenty-one percent (21%) belonged to a racial minority group, and 34% reported themselves as Latino. Seventy-four percent (87%) had incomes at or below 200% of the federal poverty level.

Teen Pregnancy

Poor school achievement, attendance and involvement are predictors of teen pregnancy and childbearing. Childbirth is the leading cause of dropping out of school among teen girls. Nationally, fewer than half of teen mothers (40%) ever graduate from high school and fewer than 2% earn a college degree before age 30. Reduced educational attainment among teen parents puts them at increased risk of unemployment, low-wage jobs, and poverty (Source: 2010 Rhode Island KIDS COUNT Factbook).

Based on 2006 data when Rhode Island's teen birth rate was 27.8 per 1,000, Rhode Island is ranked 9th in the country (1st is best) for teen birth rates and 6th (6th is worst) among the six New England states. The national rate in 2006 was 41.9 (Source: 2010 Rhode Island KIDS COUNT Factbook).

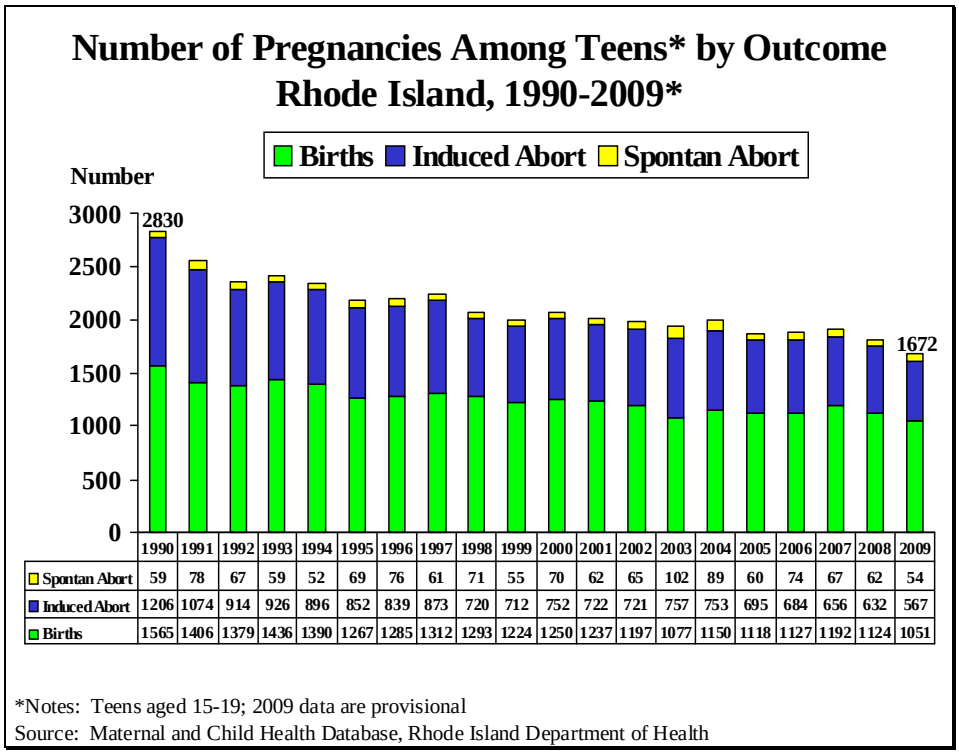
A repeat birth during adolescence compounds educational, economic, developmental, and health problems for both the mothers and their children. Once a teenager has a baby, she is at increased risk of having another baby as a teen. In 2006, Rhode Island ranked 8th nationally (tied with Louisiana, New Mexico, and Alaska) for the highest percentage of repeat teen births. Between 2004 and 2008, 18% of the births to teens 15-19 were repeat births (Source: 2010 Rhode Island KIDS COUNT Factbook). It important to note that while RI does a good job preventing first time teen births, repeat births are high. RI needs to do a better job at preventing repeat births.

In 2009 in Rhode Island, there were 1,051 babies born to mothers under age 20, accounting for 9% of all babies born in the state. Researchers estimate that approximately 11% of Rhode Island girls (vs. 18% of all girls in the U.S.) will become teen mothers (Source: 2010 Rhode Island KIDS COUNT Factbook).

While teen pregnancy occurs in families of all income levels, teen pregnancy and childbearing are strongly associated with poverty. As many as 83% of teen mothers are from poor or low income families. There is a strong inter-generational pattern of early childbearing. At least one-third of teen parents (both teen mothers and fathers) were the children of adolescent mothers themselves (Source: 2010 Rhode Island KIDS COUNT Factbook).

Since 1990, the number of pregnancies (live births, spontaneous abortions, and induced abortions) among Rhode Island teens aged 15-19 has been declining. In 1990, there were 2,830 pregnancies, and by 2000 this number had decreased by 26.8% to 2,072. Between 2005 and 2009, the number of teen pregnancies continued to decline to 1,672 pregnancies (Figure 77). During this same period, the outcomes of teen pregnancies have changed, resulting in more births and fewer abortions. In 1990, 1,565 (55.3%) of the pregnancies resulted in live births, 1,206 (42.6%) induced abortions, and 59 (2.1%) spontaneous abortions. Provisional data indicate that during 2009, 1,051 (62.9%) of the pregnancies were live births, 567 (33.9%) were induced abortions, and 54 (3.2%) were spontaneous abortions.

Figure 77



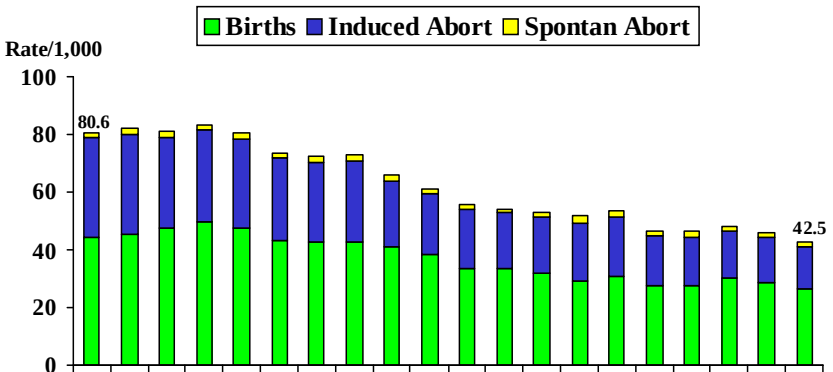
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Spontan Abort	59	78	67	59	52	69	76	61	71	55	70	62	65	102	89	60	74	67	62	54
Induced Abort	1206	1074	914	926	896	852	839	873	720	712	752	722	721	757	753	695	684	656	632	567
Births	1565	1406	1379	1436	1390	1267	1285	1312	1293	1224	1250	1237	1197	1077	1150	1118	1127	1192	1124	1051

*Notes: Teens aged 15-19; 2009 data are provisional
Source: Maternal and Child Health Database, Rhode Island Department of Health

Rates of teen pregnancies have also declined during the past 15 years. The teen pregnancy rate is the number of pregnancies among teens aged 15-19 per 1,000 female teens aged 15-19. Rates presented are calculated using U.S. Census Population (2000). In 1990, the teen pregnancy rate among 15-19 year-olds was 80.6, and by 2009 the rate dropped to 42.5 (provisional), representing a 47.4% decrease (Figure 78). During this period, the birth rate decreased by 59.9% from 44.6 in 1990 to 26.7 in 2009, and the induced abortion rate fell by 58.1% from 34.4 in 1990 to 14.4 in 2009.

Figure 78

Pregnancy Rates Among Teens* by Outcomes
Rhode Island, 1990-2009*



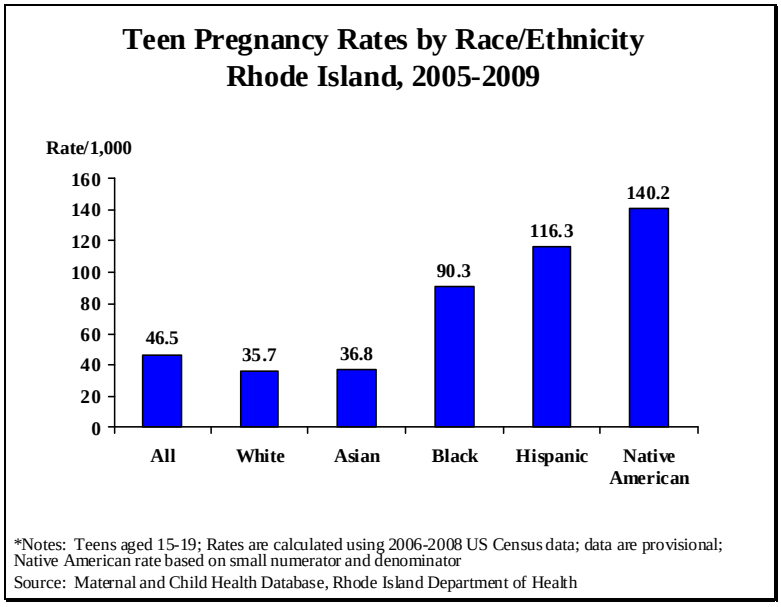
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Spontan Abort	1.7	2.5	2.3	2.0	1.8	2.3	2.5	2.0	2.2	1.7	1.9	1.6	1.7	2.7	2.4	1.6	1.8	1.5	1.5	1.4
Induced Abort	34.4	34.6	31.5	32.0	30.8	28.8	27.7	28.4	22.9	21.5	20.2	19.4	19.4	20.3	20.2	17.2	16.9	16.5	16	14.4
Births	44.6	45.4	47.5	49.7	47.7	42.9	42.5	42.7	41.0	38.2	33.6	33.2	32.1	28.9	30.9	27.6	27.8	30.0	28.5	26.7

*Notes: Teens aged 15-19; Rates are calculated using US Census data; 2009 data are provisional
Source: Maternal and Child Health Database, Rhode Island Department of Health

Racial Disparities

Although teen pregnancy rates have been decreasing, there is much variation among racial/ethnic groups. Figure 79 illustrates the differences in teen pregnancy rates by race/ethnicity during 2005-2009. Whites (35.7) and Asians (36.8) had the lowest teen pregnancy rates, while Native Americans (140.2), those of Hispanic/Latino ethnicity (116.3), and Black/African Americans (90.3) had the highest rates. As previously stated, rates for Native Americans are not considered to be statistically reliable due to the relatively small population of Native American females aged 15-19 (n = 251). These rates are based on 2006 U.S. Census projections.

Figure 79



Geographic Disparities

Nearly three-quarters or 3,903 (69.5%) of the 5,612 Rhode Island teenagers aged 15-19 who became pregnant during 2005-2009 lived in the core cities. Teens residing in the core cities (79.3) were three times more likely to become pregnant compared to teens living in the rest of the state (27.2). Teens living in Central Falls (123.9) and Pawtucket (152.0) had the highest pregnancy rates, which were of four to six times the rate of the rest of the state. Teen pregnancy rates were also 2-3 times higher among those living in Woonsocket (94.6), Providence (69.7), and West Warwick (63.6) than those living in the rest of the state (Figures 80 and 81). Compared to the other core cities, teens residing in Newport had the lowest pregnancy rate (40.2), which was nearly half of the overall core city rate (79.3) and lower than the statewide average (46.5).

Figure 80

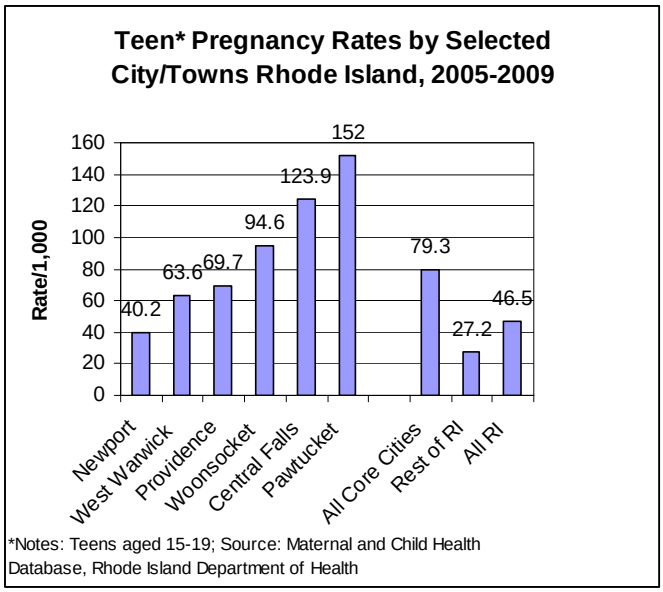
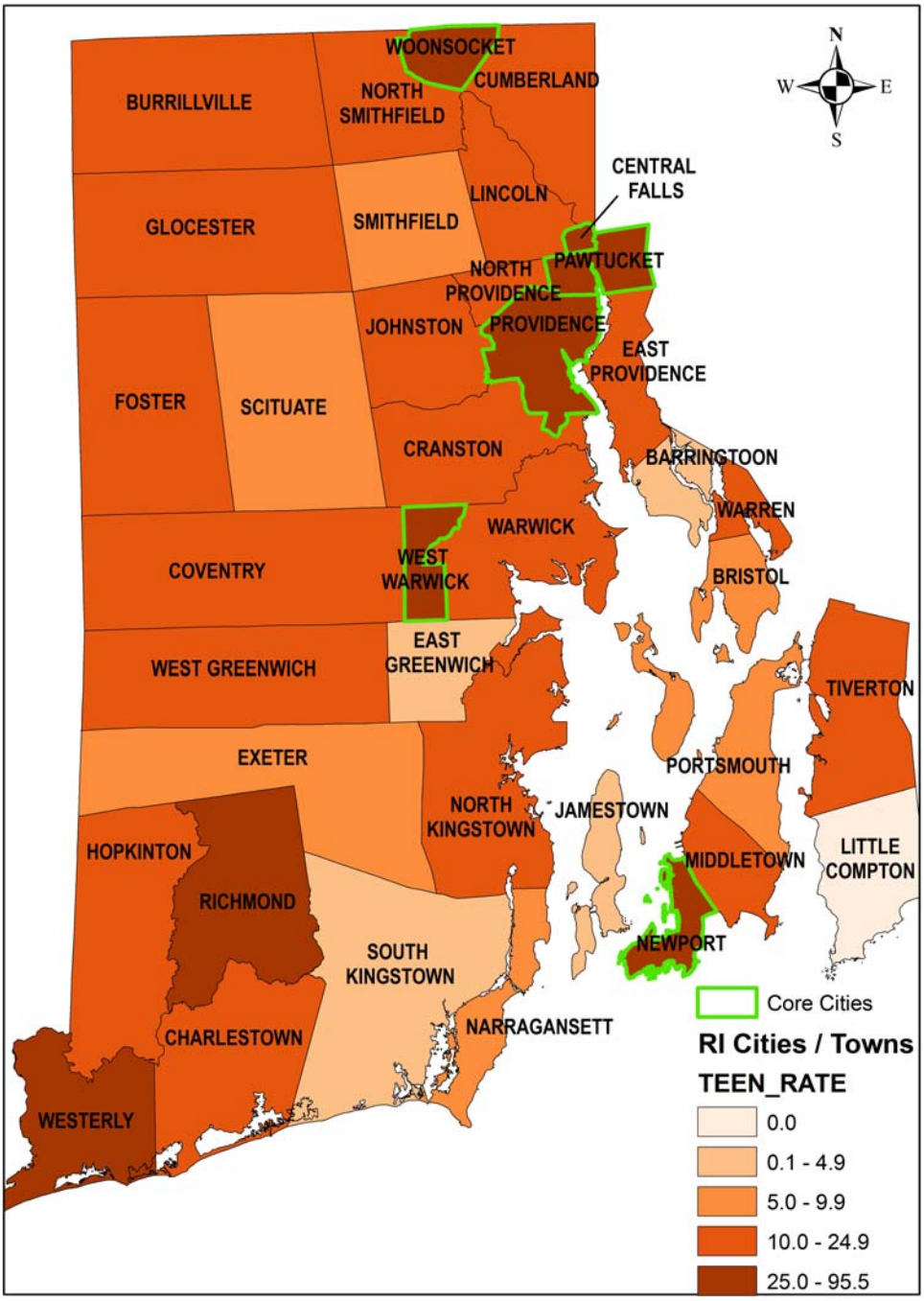


Figure 81
Birth Rate (per 1000) for Teens (15-19) by City/Town, Rhode Island, 2004-2008



Adolescent Self Sufficiency Collaborative

The Adolescent Self sufficiency Collaborative (ASSC), which is funded by the Rhode Island Department of Human Services, is a statewide network of social service and community health agencies providing services to pregnant and parenting teens aged less than 20 in Rhode Island. Each teen is provided with a case manager who provides information and helps with accessing services, such as Family Independence Program cash assistance, RIte Care Medical Assistance, Food Stamps, WIC, educational requirements and services, employment and training opportunities, childcare assistance, etc. During FY2006, the ASSC provided 5,655 case management services to 1,376 pregnant or parenting teens. More than half (58.6%) of ASSC pregnant and parenting teens were in school, GED or an ESL program, and 22% had graduated high school. Among the teens served, 44.6% were White, 15.6% were Black/African American, and 34.8% were of Hispanic/Latino ethnicity (Source: "Teen Births in Rhode Island: An Evaluation of the RI Department of Human Services Adolescent Self Sufficiency Collaborative").

Youth in Out-of-Home Placement

Youth in out-of-home care regularly experience multiple placements, lose contact with family members, and often have overlooked or neglected educational, physical, and mental health needs. Children in out-of-home care suffer more frequent and more serious medical, developmental, and mental health problems than their peers most likely due to their lack of consistent guardianship (Source: 2010 Rhode Island KIDS COUNT Factbook).

Research shows that racial and ethnic minorities are over-represented at all points in the child welfare system, including reporting, investigation, substantiation, placement, and exit from care. Minority children in child welfare systems experience significantly worse outcomes, have more placement changes, receive fewer supports, stay in care longer, are less likely to be adopted or reunited with their families, have fewer contacts with caseworkers, have less access to mental health and substance abuse services, and are placed in detention or correctional facilities at higher rates than White children (Source: 2010 Rhode Island KIDS COUNT Factbook).

Youth who age out of foster care experience high rates of poverty, homelessness, unemployment, and incarceration. They are also at increased risk for early parenthood and becoming a victim of a violent crime. In 2009 in Rhode Island, there were 1,056 youth ages 13 to 17 and 237 youth ages 18 to 21 who were in the care or custody of the Rhode Island Department of Children, Youth and Families (DCYF). Beginning at age 16, youth develop a transitional living plan that helps to identify services and supports their need to move toward self-sufficiency. In Rhode Island in Federal Fiscal Year 2009, 151 youth aged out of foster care to emancipation never having gained permanent placement through reunification, adoption, or guardianship (Source: 2010 Rhode Island KIDS COUNT Factbook).

Homeless Youth (Aged 13-17)

According to the 2010 Rhode Island KIDS COUNT Factbook, in Rhode Island between July 2008 and June 2009, 248 youth between the ages of 13 and 17 received shelter through the emergency shelter system in Rhode Island. This is a 3.5 fold increase since 1998, when 68 youth entered the Rhode Island Emergency Shelter System.

These youth are vulnerable to being separated from their families due to shelter or State child welfare policies. Since many of the emergency and domestic violence shelters do not accept unaccompanied children over the age of twelve, this figure is most likely an underestimation of the number of youth in need of shelter.

On December 31, 2009, there were 69 youth in the care of the Rhode Island DCYF who were classified as unauthorized absences/runaways (AWOL), 31 of whom were female and 38 of whom were male. These youth were AWOL from either foster care or juvenile justice placements (Source: 2010 Rhode Island KIDS COUNT Factbook).

One emergency shelter in Rhode Island meets the needs of unaccompanied and runaway homeless youth. During 2009, there were 14 unaccompanied youth ages 12 to 18 who received emergency shelter for up to 21 days, and five youth ages 17 and 18 who received long-term residential and supportive services. These programs are funded through the federal Runaway and Homeless Youth Program (Source: 2010 Rhode Island KIDS COUNT Factbook).

In 2009, the National Runaway Switchboard handled 193 crisis-related calls from Rhode Island regarding youth ages 21 and under who were homeless, runaways, or at risk of of homelessness. Nationally, in 2009, 50% of callers to the hotline were youth, and the rest were friends, family, and other adults (Source: 2010 Rhode Island KIDS COUNT Factbook).

Academic Performance and Health Risks

Middle School Students

According to 2007 Youth Risk Behavior Survey (YRBS), data show that 7% of Rhode Island public middle school students report receiving mostly D and F grades. This represents about 2,300 students statewide. Another 19% received mostly C's. Students in 8th grade vs. 6th grade, those that speak primarily non-English at home, and those with emotional or learning disabilities were more likely to report mostly D's and F's. Compared to students receiving high grades (mostly A's and B's), students receiving low grades (mostly D's and F's) were at greater risk for 25 of the 28 behaviors listed in this report. Prevalence rates among "C" students were generally between those with higher and lower academic achievement.

Students with low grades were over four times more likely than students with high grades not to wear a seatbelt and two times more likely to have ever carried a weapon. They were also at increased risk for other injury related activities (e.g. not wearing helmets, riding with a driver who has been drinking, physical fighting). Students with D and F grades were much more likely to engage in tobacco use behaviors, especially current cigarette smoking (nine times greater) and current smokeless tobacco use (11 times greater).

Students with low grades were five times more likely to have ever used marijuana and three to four times more likely to have ever tried alcohol, cocaine, inhalants, steroids, and painkillers. Students with D and F grades were also more likely to fast in order to lose or maintain weight, watch TV for 3+ hours daily, play video games or use a computer for 3+ hours daily, and not play on sports teams. There was no difference between students with high and low grades for self-perception of overweight, purging to lose or maintain weight, and insufficient physical activity.

High School Students

According to 2007 YRBS, data show that 7% of Rhode Island public high school students received mostly D and F grades. This represents nearly 3,500 students statewide. Another 25% received mostly C's. 9th graders, non-heterosexuals, and students with emotional/learning disabilities were more likely to report D's and F's. Compared to students receiving high grades (mostly A's and B's), students receiving low grades (mostly D's and F's) were at greater risk for 27 of the 30 behaviors listed in this report. Prevalence rates among "C" students were consistently between those with higher and lower academic achievement.

Students with low grades were five times more likely than students with high grades not to wear a seatbelt and four times more likely to drive after drinking alcohol or to carry a weapon. They were also at increased risk for other violence related behaviors (e.g. not going to school due to unsafe feelings, threatened/injured at school, physical fighting, dating violence, forced sexual intercourse, sad/hopeless feelings, considering suicide). Students with D's and F's had a higher prevalence for ever trying cigarettes and currently smoking and, especially, for trying cigarettes at any early age.

Students with low grades were more likely to have tried alcohol or to be current alcohol drinkers. The same was true for marijuana use and having ever taken painkillers. They were also four to five times more likely to have used cocaine or inhalants. More students with low grades had ever had sex or were currently sexually active, and six times as many initiated sex very young. Obesity and nutritional risks were similar for the two groups, but students with low grades were more likely to have insufficient physical activity.

Implications for Middle School and High School Students

Academic success depends on healthy students learning in safe and caring schools. The YRBS data show that students who struggle academically are much more likely to engage in risky behaviors. Research demonstrates that schools that focus on health and safety can profoundly impact academic achievement. School and community efforts should concentrate on the following activities in order to support positive health and academic outcomes:

- Empower local District Health and Wellness subcommittees to adopt policies, strategies and plans to strengthen the connection between health and wellness and academic achievement in the school community.
- Integrate the relationship between healthful behavior and academic achievement within school improvement and district strategic plans.
- Encourage school nurse teachers, health and physical education teachers, social workers, guidance counselors, school psychologists, and all teachers and administrators to identify and act on opportunities to promote health.
- Create interventions to address youth behavioral & mental health care needs.
- Form partnerships with health and local organizations, after school providers, and others that can provide resources and support to schools.
- Provide professional development that meets all student needs.
- Promote the link between health and academic achievement among educational leaders.

Sexual Orientation and Health Risks among High School Students

According to 2007 YRBS data, 10% of students (representative of 5,000 statewide) identified themselves as Lesbian, Gay, Bisexual, or Unsure (LGBU). Females and students with physical or emotional/learning disabilities were more likely to be LGBU. Compared to heterosexuals, LGBU students had a greater risk for 27 of 30 behaviors listed in this report and a similar risk for the other three behaviors (weapon carrying, condom use, and overweight/obesity).

LGBU students were more likely to engage in risky safety behaviors (e.g. not wearing a seatbelt, riding in a vehicle with a driver who has been drinking). They were also at increased risk for violent behaviors (e.g. being threatened or injured with a weapon at school, physical fighting, dating violence, sad and hopeless feelings). They were much more likely to skip school due to unsafe feelings, be forced to have sexual intercourse, or attempt suicide. LGBU students had a higher prevalence for ever trying cigarettes or alcohol and for being current users of cigarettes, any tobacco product, or alcohol.

LGBU students were more likely to have ever used marijuana or taken painkillers and much more likely to have ever used cocaine, inhalants, or ecstasy. More LGBU students were sexually active, initiated sex at an early age, had multiple sex partners, or had not had AIDS/HIV education. They engaged in fasting more often and were more likely to get insufficient physical activity. Emotional and learning disabilities were also much more prevalent among LGBU students.

Implications for High School LGBU Students

2007 YRBS data provide an opportunity to identify the impacts of sexual orientation on youth behavior and outcomes. Although all students participate in some risky behaviors, the data indicate that students who identify as LGBU engage in these behaviors more consistently and to a more unhealthy level. LGBU youth need targeted school and community programs to support and promote more positive outcomes, such as:

- Programs and policies that support self esteem and diversity.
- Connections to LGBU knowledgeable and supportive adults.
- Interventions addressing youth behavioral and mental health care needs.
- Increased emphasis on creating and maintaining safe schools for LGBU youth.
- Academic intervention that ensures the integration of LGBU related issues.
- Professional development for teachers/administrators on LGBU issues.
- Support for the development of gay/straight alliances in schools.

School Attendance/Suspensions

School Attendance

Poor school attendance affects school achievement and can lead to school failure. Research has shown that having established relationships between students and their teachers and their classmates can positively impact attendance. Students are more likely to stay in school if they are engaged and have a sense of belonging. According

to the 2010 Rhode Island Kids Count Factbook, in Rhode Island, during the 2008-2009 school year, 94% of middle school students and 91% of high school students enrolled in public schools attended school, based on average daily attendance. Additionally, almost half (47%) of middle and high school students in Rhode Island were absent for five or fewer days. Nearly a quarter (24%) of middle school students and 33% of high school students were absent for 12 days or more.

Attendance rates were lower among students residing in the core cities (87%) compared to students residing in the rest of the state (93%). Students enrolled in Providence schools had the lowest attendance rate of 85%. Improving the core cities' high school attendance rate from the current rate of 87% to 93% (the rate in the remainder of the state) would mean that on average 890 more students would be attending high school in the core cities each day of the school year (Source: 2010 Rhode Island KIDS COUNT Factbook).

Truancy is defined as ten or more unexcused absences in a school year by the U.S. Department of Education and the Rhode Island Department of Elementary and Secondary Education. When a student in Rhode Island is truant s/he may be referred to the Rhode Island Truancy Court by school administrators. The goal of the Truancy Court is to work with families, schools, and communities to address the individual causes of truancy through monitoring, counseling, tutoring, and other support services for students. The number of Rhode Island students charged with truancy more than quadrupled between 1997 and 2008, from 265 students to 1,214 students (Source: 2010 Rhode Island KIDS COUNT Factbook).

Suspensions

According to the 2010 Rhode Island KIDS COUNT Factbook, during the 2008-2009 school year there were 42,714 disciplinary actions. These disciplinary actions were attributed to 15,829 students, an average of 2.7 actions per student. Over half (59%) of the disciplinary actions were out-of-school suspensions. The number of actions per 100 students residing in the core cities (46) was more than twice that among students in the rest of the state (22). Woonsocket students had the highest rate of disciplinary actions, 81 per 100 students.

Attendance-related offenses were the leading type of infraction and accounted for 14,405 (34%) of the disciplinary actions. Disorderly conduct (16%), insubordination/disrespect (16%), and fighting (6%) were other major causes for the actions. During 2008-2009, almost one-third, or 13,272 (31%), of the disciplinary actions in Rhode Island public schools were attributed to 4,450 students enrolled in special education, accounting for 28% of the total number of students disciplined (Source: 2010 Rhode Island KIDS COUNT Factbook).

High School Graduation

High school graduation rate is defined as the number of graduates divided by the estimated size of the 12th grade class had no one dropped out. In Rhode Island during 2009, the high school graduation rate was 75%, the dropout rate was 14%, 5% of students completed their GEDs within four years of entering high school, and 6% were still in school in the fall of 2009.

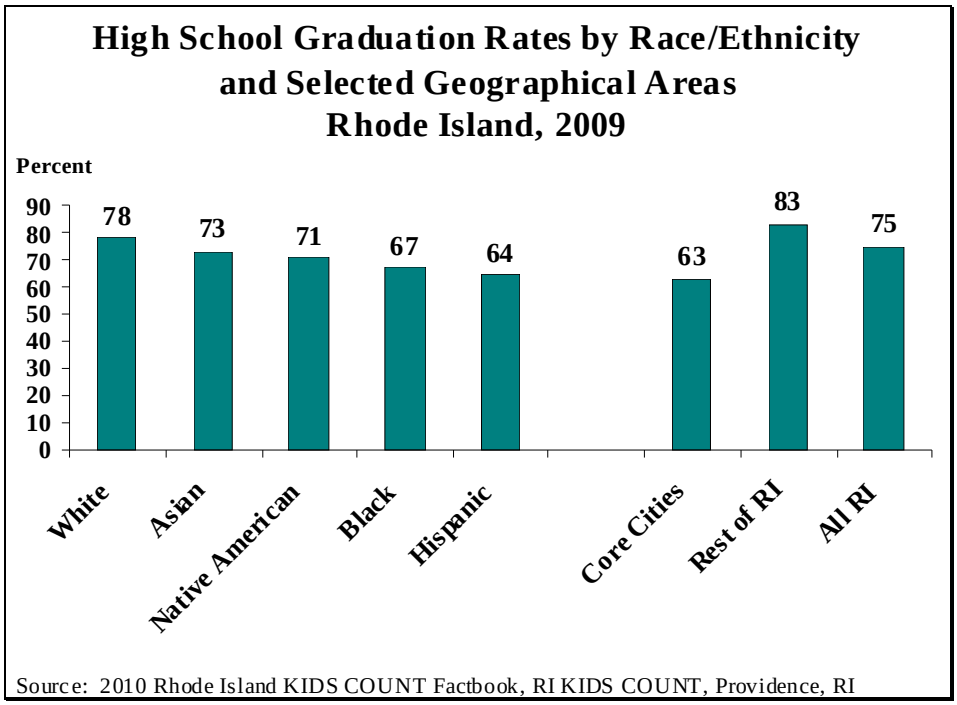
High school graduation rates varied by gender, race/ethnicity, and geographical areas (Figure 82). The Rhode Island four-year graduation rate for the class of 2009 was 71% for males and 80% for females. While female

students have lower dropout rates than males, national data show that female dropouts are significantly more likely to be unemployed and earn less on average than male dropouts from the same racial and ethnic group.

Poverty is strongly linked to the likelihood of dropping out. Students in the core cities in Rhode Island are more than twice as likely to drop out of high school as students in the remainder of the state. Minority students also are more likely than White students to drop out of school. However, lower graduation rates in minority communities mainly are driven by higher poverty rates and lower rates of educational attainment among adults in the community. Graduation rates were highest among White students (80%) and lowest among students of Hispanic/Latino ethnicity (64%). Asian students (73%), Black students (67%) and Native American students (71%) also had graduation rates that were lower than the rate for Whites. Students living in the core cities had the lowest graduation rates (63%) compared to students living in the rest of the state (83%). Specifically, students living in Central Falls (47%), Pawtucket (55%), Woonsocket (62 %), Providence (66%), and West Warwick (69%) had the lowest graduation rates in the state (Source: 2010 Rhode Island KIDS COUNT Factbook).

According to the 2010 Rhode Island KIDS COUNT Factbook, in 2006, Rhode Island was ranked 24th (1st is best) in the country for the percentage of teens who were high school graduates (73%). The national high school graduation rate for 2006 was 69%.

Figure 82



Teens Not in School and Not Working

Teens who are not in school and not working are at especially high risk for teen parenting, crime, risk behaviors, and limited economic prospects. Between 2006 and 2008, an estimated 4,323 (7%) youth ages 16 to 19 were not in school and not working in Rhode Island. Of the youth who were not in school and not working, 48% were females and 52% were males. Forty-five percent (45%) of these youth were high school graduates, and 55%

percent had not graduated from high school. Rhode Island is ranked 7th (1st is best) in the country for the percentage of teens not in school and not working. This ranking is based on an average of 2002-2007 data (Source: 2010 Rhode Island KIDS COUNT Factbook).

Education has an impact on the likelihood of finding and maintaining employment, regardless of race or ethnicity. In 2008, people with less than a high school diploma in Rhode Island were nearly twice as likely to be unemployed as those who attained a high school degree or equivalent and were almost five times as likely to be unemployed as those who received a bachelor's degree (Source: 2010 Rhode Island KIDS COUNT Factbook).

Identifying successful strategies to connect youth to school and work is fundamentally important to long-term economic and physical well-being. These strategies must be broad and include reform and redesign of community systems, community engagement in schools, early identification of youth at risk of dropping out of school, targeted workforce development programs, and multiple pathways to high school graduation and employment. A key indicator of youth connectedness to school and work is high school graduation. Programs and alternative schools that enable students to earn college credits while working towards their high school degree can improve high school graduation rates and better prepare students for high-skill careers (Source: 2010 Rhode Island KIDS COUNT Factbook).

Juveniles Referred to Family Court

Many risk factors discussed previously such as, poverty, family violence, substance abuse, mental health problems, poor school performance, etc. can lead to juvenile involvement with the justice system. Programs that focus on prevention, early intervention, and positive youth development have been shown to be the most cost-effective approaches to reducing juvenile delinquency.

According to the 2010 Rhode Island KIDS COUNT Factbook, the Rhode Island Family Court has jurisdiction over all juvenile offenders referred for wayward and delinquent offenses. All referrals to Family Court are from state and local law enforcement agencies, with the exception of truancy cases**,** which are referred by local school departments.

In 2009, 4,825 juveniles aged 10-17 were referred to Juvenile Court for 7,829 offenses, down from 5,242 youth and 8,790 offenses in 2008. Of the 7,829 juvenile offenses, 24% were for property crimes. The next most frequent types of offenses are disorderly conduct *(*19%), status offenses (19%), simple assault (10%), alcohol and drugs (9%), motor vehicle offenses (5%), violent offenses (5%), and weapon offenses (3%).

Disparities

Juveniles living in Providence account for over one-fourth (27%) of all juvenile offenses referred to Family Court. Over half (51%) of the juvenile offenses were committed by teens aged 16 and 17, 34% were by teens aged 14 and 15, 14% were by teens aged 13 or younger, and only 1% was by teens aged 18 or older. Less than half (44%) of the juvenile offenders were White, 18% were Black/African American, 12% were of Hispanic/Latino ethnicity and 2% were Asian.

Juvenile Offenders and Mental Health

According to the 2010 Rhode Island KIDS COUNT Factbook, youth in the juvenile justice system experience higher rates of mental health disorders than youth in the general population. Two-thirds of youths in juvenile justice custody in the United States meet the criteria for one or more mental disorders, and at least one in five has mental health problems that are serious enough to interfere with their functioning.

During 2008, all youth adjudicated to the Training School received counseling services as part of their service plans, and 156 youth received mental health services for psychiatric diagnoses other than conduct and substance abuse disorders; 54 males participated in the residential substance abuse treatment program. During the week of January 10, 2008, half of the youth in the Training School were receiving outpatient substance abuse treatment. (Source: 2009 Rhode Island KIDS COUNT Factbook)

Juveniles at the Rhode Island Training School

Risk factors for youth being incarcerated in the Training School include school failure, mental health problems, substance abuse, learning disabilities, and family violence. In 2008, 1,084 youth were in care and custody at the Rhode Island Training School. Among these youth, 21% were aged 13-15, 56% were aged 16-17, and 24% were aged 18-21. One quarter, 258 (25%) had been admitted previously, 64 of whom had been at the Training School three or more times. On January 1, 2009, there were 305 youth adjudicated at the Training School (Source: 2009 Rhode Island KIDS COUNT Factbook).

Teen Deaths

As discussed earlier, individual, family, community, and environmental factors can protect teens from the effects of risk behaviors and can reduce the teen death rate. Protective factors such as parental involvement, feeling connected to adults in the community, having high self-esteem, access to and participation in extracurricular activities, and access to mental health services can help teens to manage their response to conflict and stress.

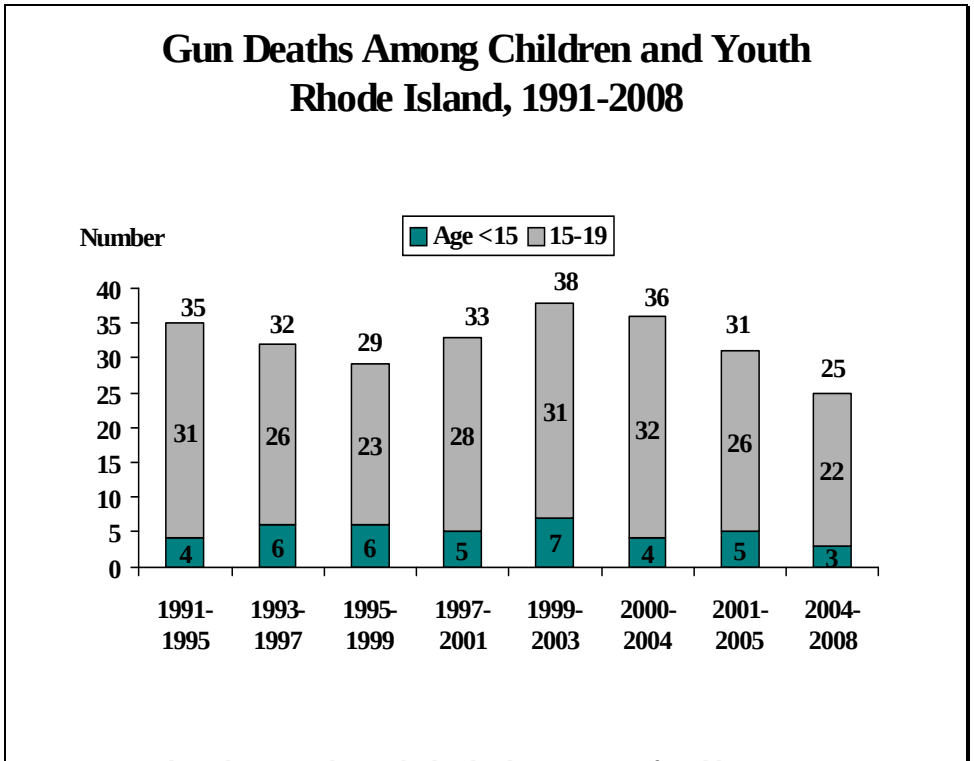
During 2004-2008, there were 153 (38.5 per 100,000) teens aged 15-19. Among these deaths, 39 (25%) were due to disease, 39 (25%) were due to intentional injuries, 72 (47%) were due to unintentional injuries, one (1%) was due to undetermined injuries, and two (1%) were due to unknown causes. In total, 112 of the 153 teen deaths were caused by unintentional injuries, with half involving motor vehicles (n=56, 50%). Of the teens ages 15 to 19 who died between 2004 and 2008, 57 (37%) lived in the core cities and 96 (63%) lived in the remainder of the state.

Among the intentional injury deaths, 20 were homicides and 19 were suicides (three females and 16 males). According to the 2009 Rhode Island Youth Risk Behavior Survey, 7% of male high school students and 8% of female high school students in Rhode Island reported having attempted suicide in the previous year, and 9% of male high school students and 15% of female high school students reported seriously considering suicide in the previous year. Female middle school students in Rhode Island (8%) were twice as likely to report having ever attempted suicide compared to their male peers (4%).

Gun-Related Deaths and Hospitalizations

Guns are the leading cause of fatal teen violence and are used in more than three- quarters (82%) of teen homicides in the U.S. In Rhode Island between 2004 and 2008, there were 46 gun-related hospitalizations of youth ages 15 to 19 and 22 deaths of youth ages 15 to 19 attributed to firearms. Figure 83 shows the number of gun deaths among children and youth during 1991-2008 in five-year periods. Children living in states with the highest levels of gun ownership are 16 times more likely to die from unintentional firearm injury, seven times more likely to die from firearm suicide, and three times more likely to die from homicide than children living in the states with the lowest levels of gun ownership (Source: 2010 Rhode Island KIDS COUNT Factbook).

Figure 83



Source: Hospital Discharge Database, Rhode Island Department of Health

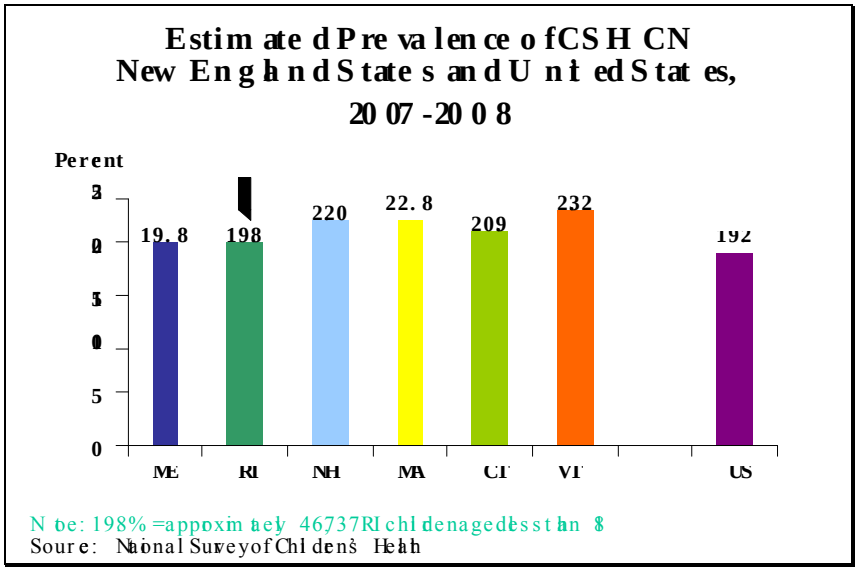
3E. CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Rhode Island espouses the AAP (1998) definition of children with special health care needs (CSHCN) as "children and youth who have or at risk for a chronic physical, developmental, behavioral or emotional condition and who also require health and related services of a type or amount beyond that required by children generally." These needs can be physical, developmental, behavioral or emotional, and include conditions such as mental retardation, autism spectrum disorders, hearing impairments, communication disorders, seizure disorders and congenital diseases. CSHCN often have multiple disabilities that can further impact their functioning. These special needs require educational, health care and/or related services of a type or amount above that required by children generally.

Over the past decade the prevalence rate of children in Rhode Island with special health care needs has risen from 14.1% (2001-2002) to 17.2% (2005-2006) consistently surpassing the national figures of 12.8% and 13.9% respectively, according to the National Survey of Children with Special Health Care Needs. During 2006, Rhode Island had the 2nd highest rate of CSHCN among the 6 New England states and had the 6th highest rates among the 50 states and DC.

Data from the National Survey of Children's Health conducted during April 2007- July 2008 indicate that 19.8% of Rhode Island children aged less than 18 have special health care needs and that Rhode Island's rate is 25th nationally, tying with Maine (24th). This figure is higher than the national estimate of 19.2% and lower than four of the New England states (Figure 84). Based on this weighted estimate, approximately 46,737 children in Rhode Island have special health care needs.

Figure 84

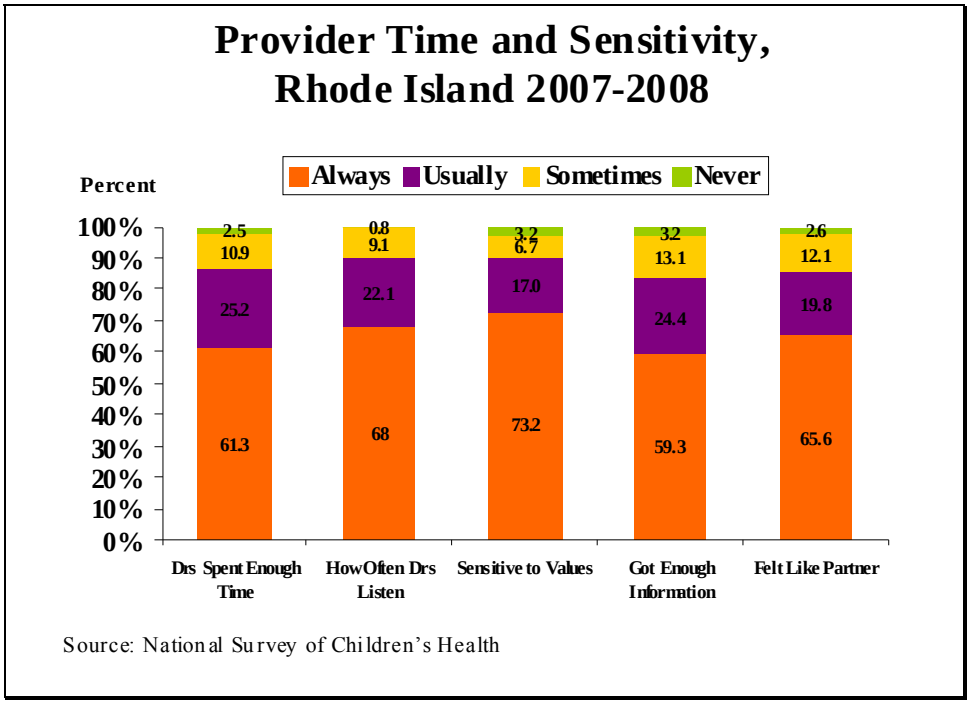


Medical Home

The needs of children with special health care needs are best met through a medical home, which can provide care that is comprehensive, coordinated, continuous, accessible and family centered. Data from the 2007 National Survey of Children's Health (NSCH) show that Rhode Island children are more likely to have a medical home (63.6%) than children nationally (57.5%). However, children with special health care needs are less likely to have a medical home (52.8%) than children without special health care needs (66.2%).

According to the 2007 NSCH of all the children that had a preventative health care visit in the past year, CSHCN were more likely to have had a preventative visit (91,4%) than non-CSHCN (87.8%). The NSCH survey also found that 85.4% of Rhode Island families with CSHCN stated their child's doctors or health care providers always or usually made them feel like a partner in the decision making for their child's care, although 14.7% only sometimes or never felt like a partner. Survey respondents also reported high satisfaction rates (always or usually) with their health care providers in the following areas: providers spent enough time with respondent (86.5%); providers listened carefully to respondent (90.1%); providers were sensitive to respondent's values/customs (90.2%); and provider gave information respondent needed (83.7%). Although these rates are high, 13.4% of respondents reported their providers only sometimes or never spent enough time with them; 9.9% reported their providers only sometimes or never listened to them; 9.9% reported their providers were only sometimes or never sensitive to family values/culture; 16.3% reported they only sometimes or never received information on their child's health or health care that they needed (Figure 85).

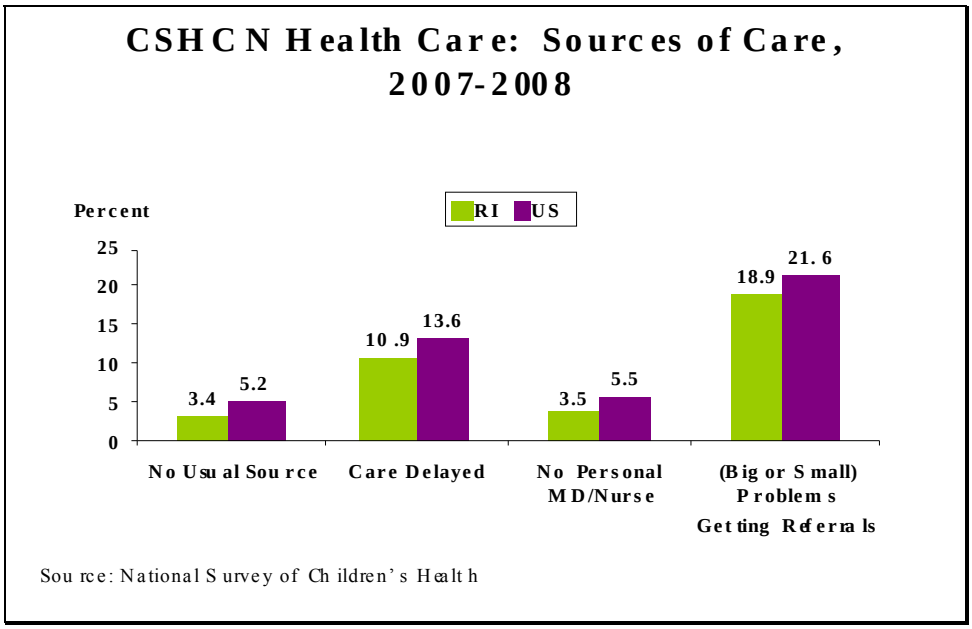
Figure 85



In Rhode Island, 29.0% of families of CSHCN reported they were without family-centered care compared with 34.5% of families of CSHCN nationally, according to the 2007 NSCH. Additionally, 3.4% of Rhode Island families with CSHCN reported they did not have a usual source of health care; close to the national figure of 5.2%.

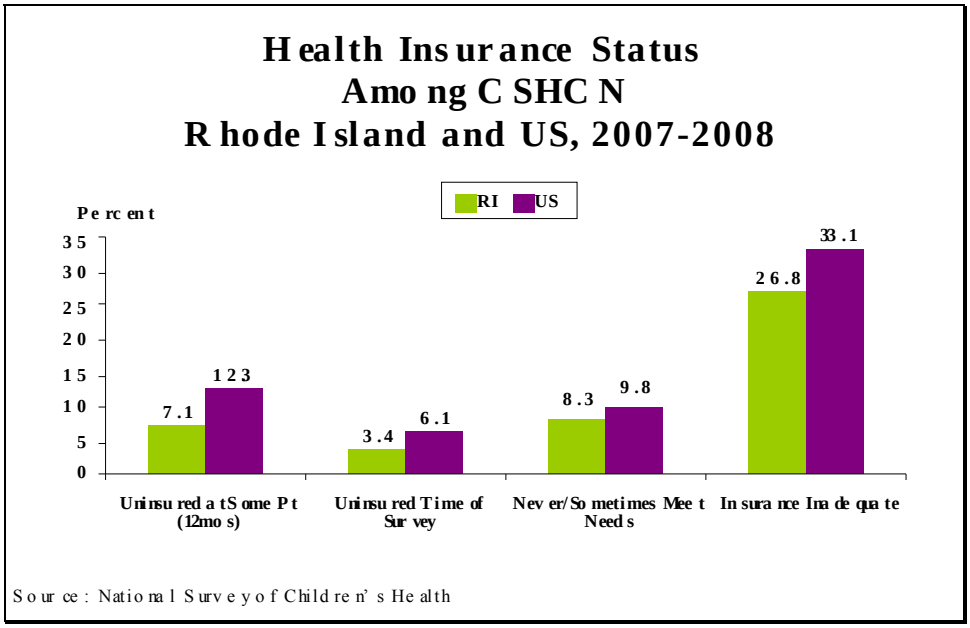
One in ten (10.9%) Rhode Island respondents indicated their child's care had been delayed, compared to the national rate of 13.6%. A lower proportion of Rhode Island families (3.5%) reported they did not have a personal doctor or nurse compared to the national average (5.5%). Obtaining referrals was also less problematic for Rhode Island families with CSHCN, where 18.9% reported they had big or small problems getting referrals compared with 21.6% nationally (Figure 86).

Figure 86



A lower percentage of Rhode Island families with CSHCN (7.1%) reported they had no health insurance coverage for their child compared with the national percentage (12.3%). However, approximately, one in ten families with coverage stated their insurance benefits sometimes or never met their needs and 26.6% of Rhode Island families of CSHCN responded that their insurance was inadequate, compared to 33.1% of families nationally (Figure 87).

Figure 87



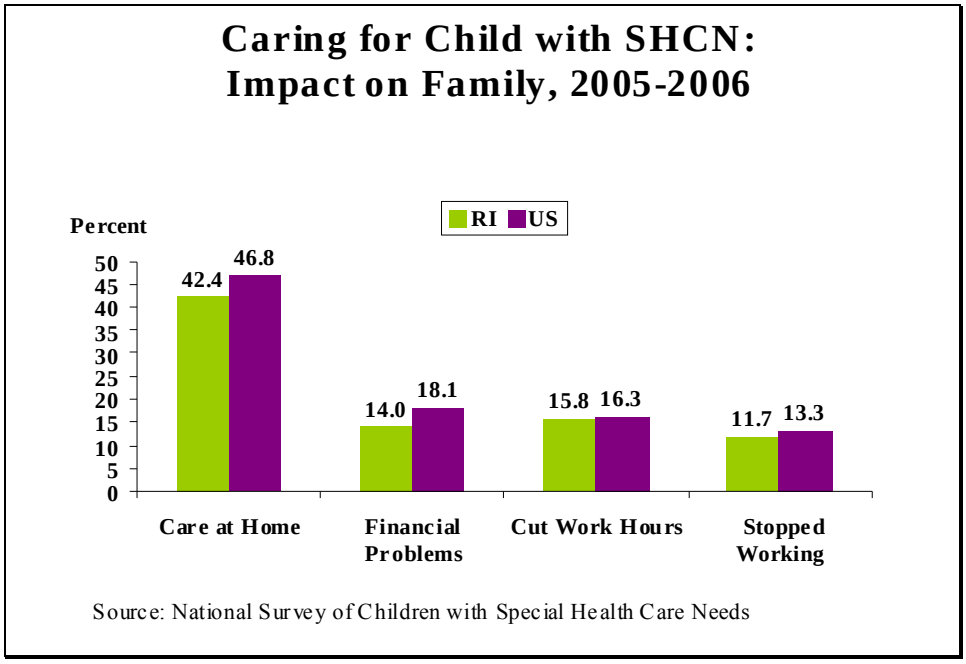
Medical Home Assessment for Children with Birth Defects

The Rhode Island Birth Defects Program (described in more detail later) has been identifying babies born with birth defects using hospital discharge data and linking them to the KIDSNET database in order to determine whether these babies receive appropriate preventive services, a proxy for medical home. Additionally, the Birth Defects Program is working with primary care and specialty care providers to determine whether children with birth defects receive comprehensive, coordinated care on a timely basis.

Impact of Caring for CSHCN on Families

Nearly half (42.4%) of the Rhode Island families that participated in the 2005-2006 National Survey of CSHCN care for their children with special health care needs at home. Many families with CSHCN have had financial problems (14.0%), have had to cut work hours (15.8%) or have had to stop working (11.7%) (Figure 88).

Figure 88



The impact of caring for a child with special health care needs on the family was further analyzed by income and insurance (Figures 89 and 90). Families with incomes below 200% of the federal poverty level or without insurance tended to experience a stronger impact on their finances, employment and time than families at/above 200% of the federal poverty level or with insurance.

Figure 89

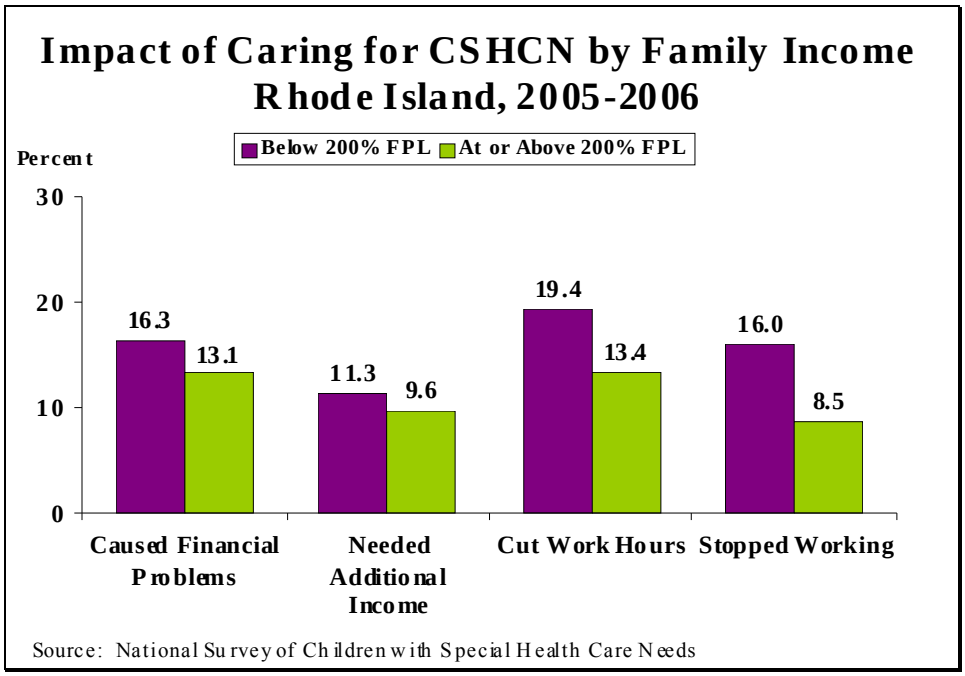
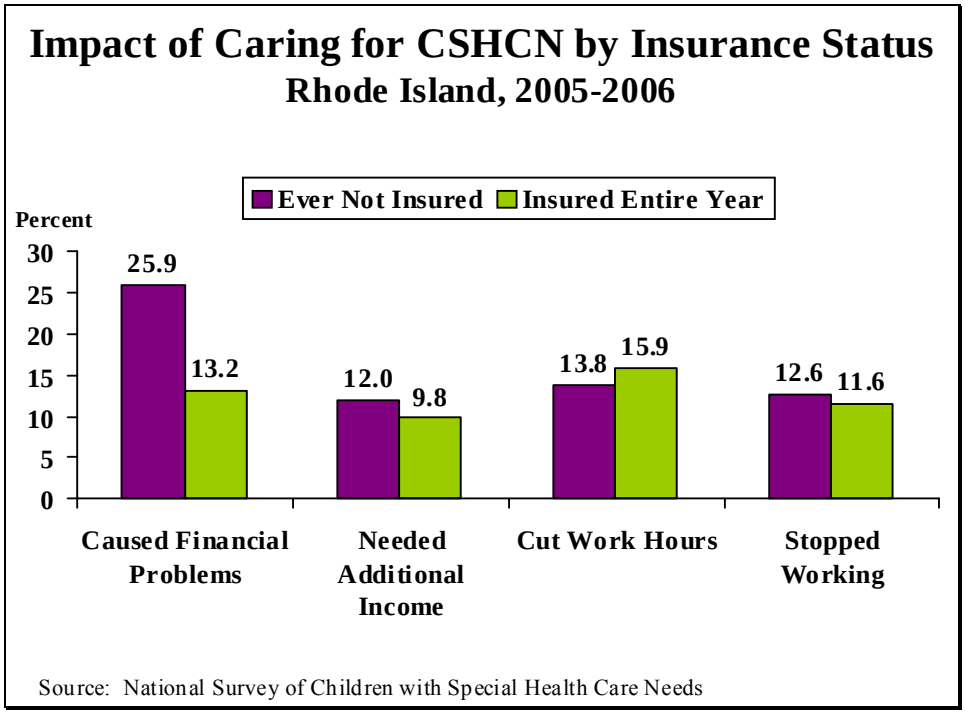


Figure 90



Overall Impact

More than one-third of Rhode Island families with CSHCN experienced financial and/or employment problems in 2005-2006. The overall impact of caring for their CSHCN was lower among Rhode Island families (33.7%) compared to families nationally (40.4%). Approximately one in seven (14.0%) of Rhode Island families reported that caring for their CSHCN had resulted in financial concerns compared with more than one in six (18.1%) families nationally. Similarly, 23.0% of Rhode Island families of CSHCN reported employment problems (had to cut work hours or stopped working) compared to 23.8% of families nationally.

Families impacted overall were more likely to have young children aged birth-five; have incomes less than 200% of the poverty level; and have children whose condition affected their activities. These families were approximately twice as likely to be impacted than families with teenagers, living at or above 200% poverty, or with children whose condition affected their activities. Families with children whose condition usually or always affected their activities (59.3%) were 3.2 times more likely to be impacted than families with children whose condition never affected their activities (18.5%).

Financial Problems

Data from the 2005-2006 National Survey of CSHCN suggest that financial problems were more likely to occur among families with adolescents; in families with incomes less than 200% of the federal poverty line and in uninsured families, or families that were periodically or ever uninsured. Specifically, families with older children and teenagers aged 12-17 were more likely to experience financial problems due to child's health conditions both nationally (19.2%) and in Rhode Island (16.8%) than families with younger children. Also, in Rhode Island, families

with incomes below 200% of the poverty line were more likely to have financial problems (16.3%) than those with incomes at 200% or above (13.1%). The same demographic also was more likely to need additional income (11.3%) compared to (9.6%) at or above the federal poverty level (Figure 89).

Nearly 75% of Rhode Island families of CSHCN with health conditions that affected their daily activities either consistently (24.7%) or moderately (49.4%) had incomes below 200% of the federal poverty line; signifying that only 25.9% of Rhode Island families at that same income bracket had a child with special needs whose activities were never affected. The national rates were similar with 32.3% CSHCN's daily activities affected consistently, 40.8% affected moderately and 26.9% never affected in families with incomes below 200% of the poverty line.

Employment Problems

Data from the 2005-2006 National Survey of CSHCN found that factors associated with employment problems were similar to those described for financial problems, although the influence of child's age was more consistent throughout all of the age groups. Employment problems were more likely to occur among families with incomes less than 200% of the poverty level including: the need to reduce work hours (19.4%) compared to (13.4%); and stop working altogether (16.0%) compared to (8.5%) at or above the federal poverty level.

Survey of Rhode Island Families Raising Children with Special Health Care Needs

During the winter of 2005, the Office of Special Health Care Needs, Data and Evaluation Unit and Family Voices of Rhode Island developed a survey to be conducted by Family Voices among families with CSHCN. The purpose of the survey was to learn more about the impacts and challenges that these Rhode Island families are facing. A total of 242 families completed the surveys. Among those who had other children (n=158), 130 (82.3%) reported that caring for their child with special needs affects the time they spend with their other children. Three out of five respondents (60.8%) agreed that caring for their child with special needs creates stress on important relationships (e.g., marriage, partner, etc.). More than two-thirds, 171 (70.7%), of the respondents agreed that caring for their child creates financial problems for the family. A higher proportion of respondents, 195 (80.6%), felt that caring for their child does not permit them to work as much as they would like. Similarly, 200 (82.6%) respondents felt that caring for their child with special needs affects the kinds of activities they are able to do with their family. Approximately, the same number of respondents, 201 (83.1%) feel overwhelmed a lot of the time and 156 (64.5%) said that caring for their child has caused a decline in their physical or mental health. Finally, two-thirds (67.8%) of those surveyed reported that caring for their child with special needs has limited their support system (e.g., family, friends, etc.). Approximately half, 124 (51.2%) of the respondents were insured by RIte Care or Medicaid. More than two-thirds, 173 (71.5%) were married and 130 (53.7%) had more than a high school education.

Genetic Counseling and Testing

According to the 2005-2006 National Survey of CSHCN, 5.7% of respondents nationally stated they had needed genetic counseling services during the past 12 months and 3.7% of Rhode Island respondents, of whom 23.8% nationally and 20.3% in Rhode Island did not receive all the services they needed.

Data from the Rhode Island PRAMS surveys from 2004-2008, indicate that 73.3% of respondents were aware that their babies were tested in the hospital for genetic conditions. This figure varies by maternal demographics, where women were less likely to be aware of the testing if they were of Hispanic ethnicity (56.9%), had household incomes less than $10K (68.5%), were unmarried (69.8%), had public insurance (67.4%) or had less than a high school education (70.5%).

Prevention of Birth Defects: Folic Acid Consumption

Among Rhode Island PRAMS survey respondents, during 2004-2008, more than half (51.8%) of the respondents reported they had not taken a multivitamin during the month before they got pregnant. However, between 2004 and 2008, this figure fluctuated, rising from 47.6% in 2004 to 53.9% in 2006, and then dropping to 50.9% in 2007 only to increase to 54.7% in 2008. Respondents were more like not to have taken a multivitamin if they were aged less than 20 (70.9%), had household incomes of less than $10,000 (67.7%), were single (67.5%), had a high school education (72.2%), had public insurance (67.7%) or were of Hispanic/Latino ethnicity (61.1%).

Additionally, data from the 2008 Women's Health Screening and Referral Program indicate that 83% of women who completed a Care Questionnaire (while waiting for their pregnancy test results) were not taking a multivitamin with folic acid daily.

Birth Defects Surveillance

Birth Defects and Infant Mortality

Rhode Island began developing a birth defects information system in 2000, with funding from the Centers for Disease Control and Prevention (CDC). The Rhode Island Birth Defects Program (RIBDP) is located at the Rhode Island Department of Health, Center for Health Data and Analysis. RIBDP was created to identify newborns with birth defects, assure that these children receive appropriate preventive, specialty and other healthcare services, and monitor trends. All information collected by the Program is kept confidential and is protected under State and Federal privacy laws.

During 2003, the Rhode Island General Assembly enacted legislation (General Laws 23-13.3) requiring the development and implementation of a birth defects reporting, surveillance, and information system. This system describes the occurrence of birth defects in children up to age five, detects trends of morbidity and mortality, and helps assure children with birth defects receive services and treatment on a timely basis.

The Rhode Island Birth Defects Advisory Council was appointed by the Director of Health to advise the Department on the establishment and implementation of the system and recommend a list of birth defects to be reported to the surveillance system. It is critical that state agencies, healthcare services providers, community organizations, parents, and other key stakeholders, provide input not only for the development of the surveillance system, but also for issues regarding information dissemination and analyses.

Approximately, 20% of all infant deaths in the United States are due to birth defects. In Rhode Island, this proportion is lower. Among the 71 infants who died in Rhode Island during 2008, 11 of the deaths (15.5%) were related to a birth defect. This proportion represents a decrease from 2004, when 16 of the 68 (23.5%) deaths among

Rhode Island infants were associated with a birth defect. During 2004-2008, the birth defects related infant mortality rate decreased by 27%, from 125 deaths per 100,000 births in 2004 to 91 per 100,000 in 2008.

Many infants who are born prior to 37 weeks gestation or preterm also have birth defects. A study conducted by the National Birth Defects Prevention Network showed that birth defects were more than twice as common among preterm births compared with term births and that 8% of preterm births had a birth defect (Source: doi: 10.1007/s10995-008-0348-y) In Rhode Island, 93 (6.9%) of the 1,339 babies born preterm in 2008 had a birth defect. Preterm births are also the leading cause of infant deaths in Rhode Island and in 2008, 19 (26.8%) of the 71 infant deaths were due to prematurity.

The Rhode Island Birth Defects Program

The Rhode Island Birth Defects Program's highest priorities are:

1) Understanding the overall prevalence and demographics of children with birth defects in Rhode Island
2) Assuring that children and their families receive appropriate services and referrals
3) Identifying and closing gaps in services and systems for families of children with birth defects

RIBDP uses hospital discharge data (HDD) to serve as the primary source for capturing birth defects data in Rhode Island. RIBDP works with Care New England to collect discharge audits from Women and Infants Hospital and Kent County Hospital, which represent about 80% of all birth defects cases in the state. RIBDP also collects information from specialty clinics, such as the Child Neurodevelopment Center and the Genetics Counseling Center at Rhode Island Hospital, to obtain additional cases and information on services provided to families of children with birth defects.

Birth defects cases are identified using diagnoses coded by the 9th Clinical Modification of the International Classification of Diseases (ICD 9-CM) and include 740-759.9 and 760.71 codes. Accuracy of birth defects diagnoses is confirmed through chart review of birth defects cases at Women and Infants and Kent County hospitals. RIBDP updated its birth defects case definition in 2008 to exclude certain minor congenital anomalies and to reflect birth defects surveillance guidelines developed by the National Birth Defects Prevention Network. Previous data have been adjusted to fit this current case definition for comparable data analyses.

In an effort to determine whether children with birth defects receive appropriate preventive services, the Birth Defects Program links children identified with birth defects to KIDSNET. Since KIDSNET maintains information from 9 program databases, children who are not receiving services can be identified and provided outreach and referrals.

The Prevalence of Birth Defects in Rhode Island

In 2008, RIBDP began collecting birth defects cases identified during the prenatal period from collaborating laboratories and prenatal clinics such as the Genetics Testing Center and Fetal Treatment Program at Women and Infants Hospital. Prenatal case finding expands birth defects ascertainment and improves the prevalence estimate of certain birth defects by detecting cases not found at the time of newborn discharge. Currently, prenatal case data are provisional and are not included in the Rhode Island birth defects

prevalence reporting. The RIBDP plans to establish routine prenatal surveillance with existing and future prenatal data partners to better understand birth defects prevalence and trends in Rhode Island.

Figures 91 and 92 show the overall count and prevalence of birth defects in Rhode Island over the five-year period from 2004 to 2008. During this period, the rate of birth defects in Rhode Island decreased by 10.7%, from 632 per 10,000 live births in 2004 to 538 per 10,000 in 2008. A three year moving average indicates a 6.2% decrease in overall birth defects prevalence from 2004 to 2008. It should be noted that the low birth defects rate in 2006 (405 per 10,000) is an aberration, as there were no changes in ascertainment methodologies or in the trends of other birth outcomes such as, low birth weight, preterm births and infant mortality. Hospital discharge data indicate that during 2002-2006, among the 61,308 babies born to Rhode Island residents in Rhode Island maternity hospitals, 3,314 (5.4%) had at least one birth defect.

Figure 91

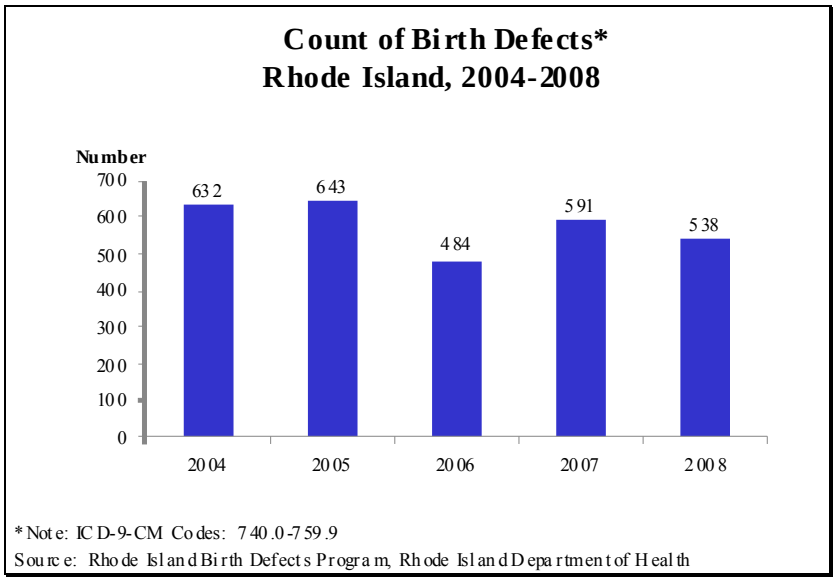
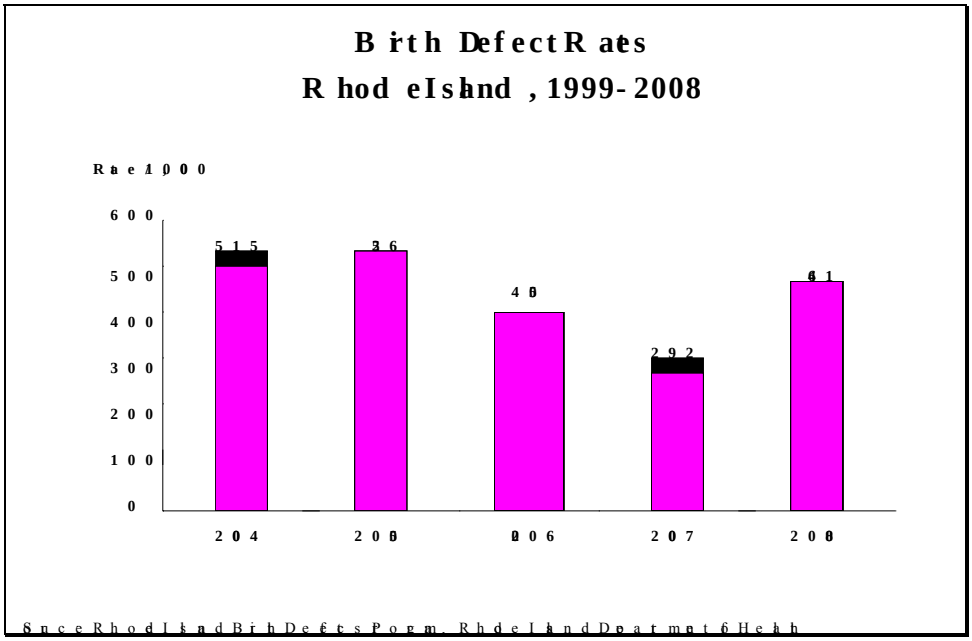


Figure 92



Tables 4 and 5 show the number and prevalence of selected birth defects among Rhode Island residents during 2004-2008 and organized by organ system. Cardiovascular defects, those relating to the heart, are the most common type of defects (192.3 per 10,000). Among these defects, ventricular and septal defects, and pulmonary valve atresia and stenosis represent the highest proportion of these cases. Medical record reviews conducted during 2008-2009 indicate that atrial septal defects (ASD) share an ICD-9 code (745.5) with patent foramen ovale (PFO), a condition which is not considered a birth defect. Since these two conditions were not distinguished during earlier chart reviews, the prevalence of atrial septal defects may be overestimated for the five-year period.

Table 4: Birth Defects by Body System
Rhode Island, 2004-2008

Organ System	**Number**	**Rate per 10,000**
Cardiovascular	1156	192.3
Musculoskeletal/Integumental	847	140.9
Genitourinary	832	138.4
Gastrointestinal	252	41.9
Eye, Ear, Face and Neck	155	22.5
Chromosomal	152	25.3
Central Nervous System	112	18.6
Respiratory	95	15.8
Orofacial	83	13.8

Other common birth defects in Rhode Island include those related to musculoskeletal (140.9 per 10,000) and genitourinary (138.4 per 10,000) systems. Among these groups of defects, hypospadias and epispadias (35.6), obstructive genitourinary defect (26.8) and Down syndrome (13.1) are most frequent, but rates for these conditions have remained stable.

Table 5: Selected Birth Defects
Rhode Island, 2003-2008

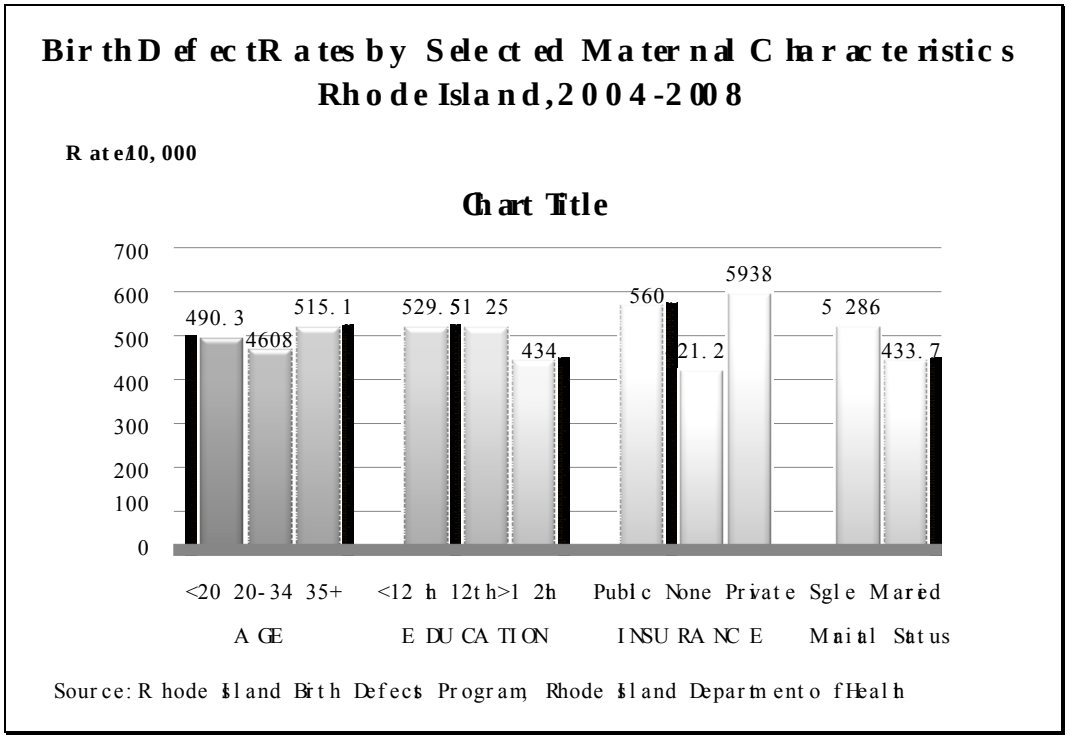
Birth Defect	Number	Rate per 10,000 live births
Central Nervous System		
Spina Bifida	14	2.3
Anencephaly	1	0.2
Encephalocele	3	0.5
Eye		
Congenital cataract	2	0.3
Anophthalmos and microphthalmus	3	0.5
Ear		
Microtia	5	0.8
Cardiovascular		
Transposition of great arteries	13	2.2
Tetralogy of Fallot	25	4.2
Ventricular septal defect	213	35.4
Atrial septal defect	215	35.8
Pulmonary valve atresia/stenosis	78	13.0
Tricuspid valve atresia	5	0.8
Aortic valve stenosis	0	0.0
Hypoplastic left heart syndrome	5	0.8
Coarctation of aorta	10	1.7
Orofacial		
Cleft lip with and without palate	45	7.5
Cleft palate	38	6.3

Gastrointestinal		
Esophageal atresia/tracheosophageal fistula	14	2.3
Rectal and large intestinal atresia/stenosis	21	3.5
Genitourinary		
Hypospadias and epispadias	214	35.6
Renal agenesis/hypoplasia	11	1.8
Obstructive genitourinary defect	161	26.8
Musculoskeletal		
Club foot	64	10.6
Reduction deformity, upper limbs	16	2.7
Reduction deformity, lower limbs	7	1.2
Diaphragmatic hernia	15	2.5
Chromosomal		
Down Syndrome	79	13.1
Trisomy 13	5	0.8
Trisomy 18	12	2.0
All Birth Defects	**3651**	**607.3**

Maternal Characteristics

Babies born to older women (aged 35 or older), women with less than a 12th grade education, single women, and women with publicly funded health insurance or no health insurance are at a higher risk for birth defects (Figure 93). During 2004-2008, the birth defects prevalence rate among women aged 35 or older was 515 (per 10,000 live births) compared to 461 among women aged 20-34. The birth defects rate among women with less than a 12th grade education (529) or with a 12th grade education (513) was higher than the rate among women with higher education levels (434). Similarly, single women (529) were more likely to have a baby with a birth defect than married women (424). Women insured through public programs, such as RIte Care and Medicaid (533), were also more likely to have a baby born with a birth defect than married women insured through commercial or private providers, such as Blue Cross or United Healthcare (560). It should be noted that although a small number of Rhode Island women did not have health insurance at the time of delivery (approximately 1%), the risk for having a baby with a birth defect was highest among this population (560) compared to the population who had private insurance (421).

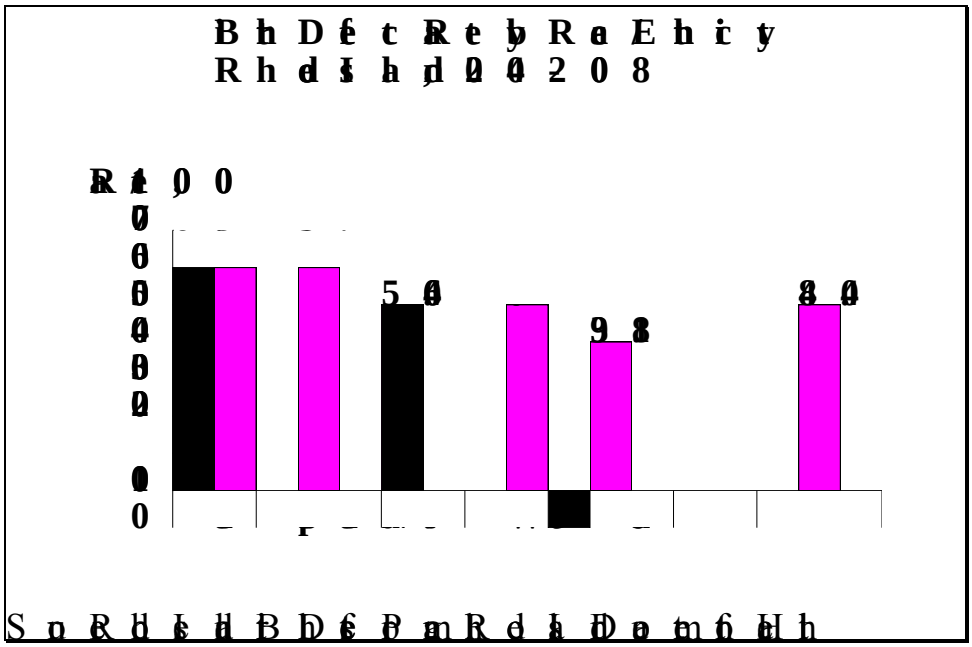
Figure 93



Racial and Geographic Disparities

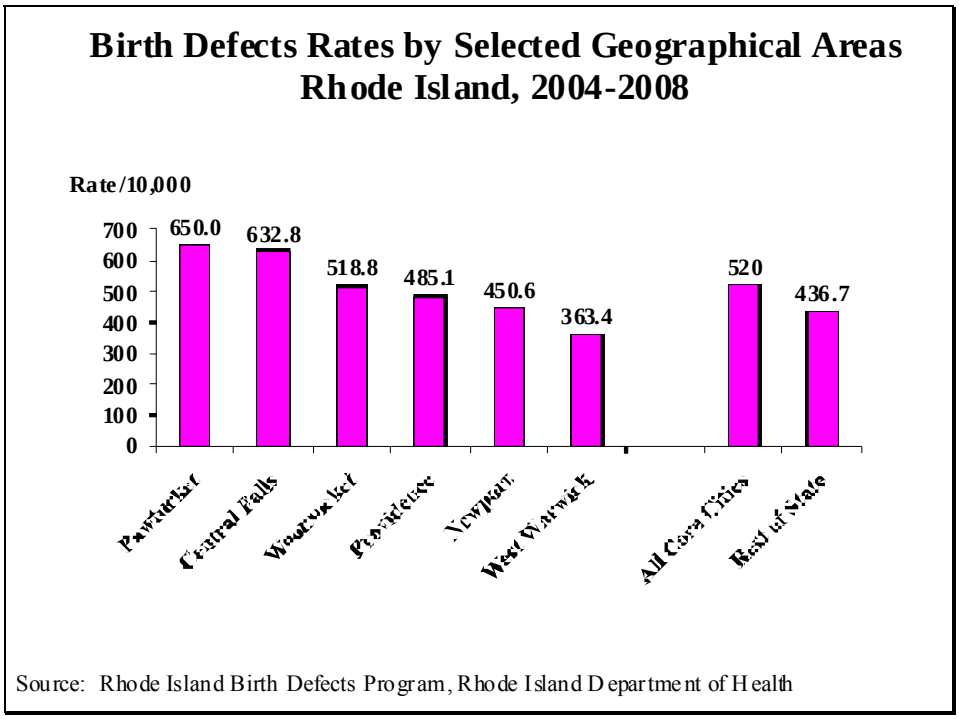
Birth defects prevalence varies by race and ethnicity and geographical residence. During 2004-2008, the average birth defects prevalence rate among Blacks and African Americans (632 per 10,000 live births) and Hispanics (620) was 1.3-1.4 times the rate for Whites (467). During this period, Asian women (338) were least likely to have a baby born with a birth defect (Figure 94).

Figure 94



Babies born to residents of core cities (Providence, Woonsocket, Pawtucket, Newport, and Central Falls) were about 1.2 times more likely to have a birth defect than those born to residents living in the rest of the state (Figure 95). Compared to the other core cities, the birth defects rate in West Warwick was the lowest (338) and was below the statewide rate (480). Pawtucket (650) and Central Falls (633) had the highest birth defects rates in the state. These two cities also have higher rates of teen pregnancy, low birth weight, late prenatal care, and poverty compared to the rest of the state.

Figure 95



Source: Rhode Island Birth Defects Program, Rhode Island Department of Health

Service Assessment and Assurance for Children with Birth Defects

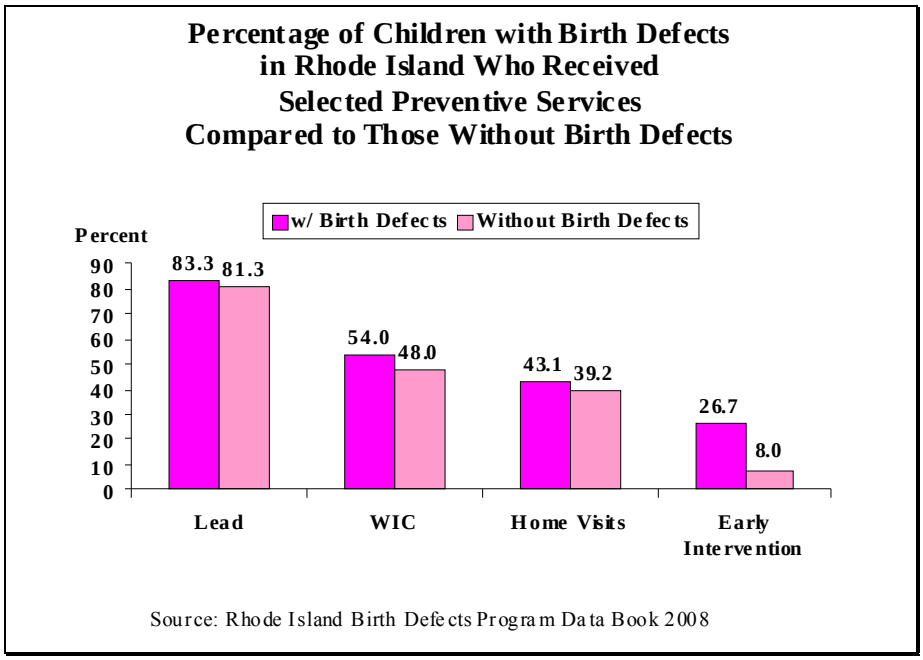
A priority goal of RIDBP is to assure that children with birth defects receive appropriate and timely preventive, specialty, and other health care services. The RIBDP, in collaboration with the Rhode Island Parent Information Network (RIPIN), employs a Family Resource Specialist (parent consultant) who interviews parents of children with specific conditions to determine whether their children have received appropriate referrals and services on a timely basis. The Family Resource Specialist meets with parents at pediatric practices that serve a high volume of children with birth defects, such as the Children's Neurodevelopment Center (CNDC) at Hasbro Children's Hospital. The RIBDP will also work with RIPIN to mail service assessment forms to additional parents of children with birth defects and conduct telephone follow-up with non-respondents. The service assessment form was designed to determine what services and referrals were provided to children and at what age they were provided, based on national guidelines for specific conditions. Specifically, the assessment asks about services such as pediatric visits, nutritional support, clinical screenings, chromosomal tests, and genetic counseling; and about referrals to developmental and education services, and to family support groups. Currently, this service assurance process is being conducted among families of children with Down syndrome, cleft lip/palate and clubfoot. The RIBDP plans to expand this service assurance process to all sentinel birth defects in the near future.

KIDSNET

The RIBDP is linked to Rhode Island's integrated child health information system, KIDSNET, to determine whether children with birth defects have received appropriate preventive and program services. Data from the Rhode Island Birth Defects Program Data Book (2008) indicate that in comparison to children without birth defects, children with birth defects are more likely to have been screened for lead poisoning (83.3% vs. 81.3%), be enrolled in Women, Infants and Children (WIC) (54.0% vs. 48.0%), receive home visits (43.1% vs. 39.2%) and be enrolled in the Early Intervention Program (26.7% vs. 8.0%). Nearly all (94.9%) of the children identified with Down syndrome were enrolled in the Early Intervention Program, 38.5% received a home visit and 33.3% were enrolled in WIC (Figure 96).

The RIBDP has found that using a multi-pronged approach provides amore complete representation of the degree to which children and families are receiving appropriate and timely medical and social support services. Collaboration with providers, families, and social support organizations is critical for data collection and service assessment.

Figure 96



To evaluate the efficacy of home visiting and early intervention referrals for newborns with a birth defect, a study was undertaken to assess the Newborn Developmental Risk Screening Program by birth defects body system. Results showed that among newborns born in Rhode Island during 2003-2007, 94% of birth defects cases were referred to home visiting programs and 84% of cases with chromosomal anomalies were referred to the Early Intervention Program through the newborn developmental risk screening process. Newborns with birth defects who were not referred to home visiting and/or early intervention via the Newborn Developmental Risk Screening Program were likely referred for services by other referral sources such as the WIC Program or a clinician.

Sentinel Conditions

The Birth Defects Advisory Council identified a set of conditions for targeted outreach and follow-up to help assure appropriate services and referrals are made. The selection was based on criteria that included the following: number of children affected; timeliness of identification; severity; service availability; resource intensity; recurrence risk; and availability of prevention strategies. The purpose of creating this list is to assure that families of children with these conditions are provided information and resources.

Table 6: Rhode Island Birth Defects Program –Sentinel Conditions List

CONDITION	ICD-9-CM CODE
NEURAL TUBE DEFECTS	
» ANENCEPHALY	740.0-740.1
» SPINA BIFIDA	741.0-741.9
EYE	
» ANOPHTHALMIA/MICROPHTHALMIA	743.0, 743.1
» CONGENITAL CATARACT	743.30-743.34
» ANIRIDIA	743.45
CONGENITAL HEART DISEASE	745-747
CLEFT LIP/PALATE	749
ESOPHAGEAL ATRESIA/STENOSIS	750.3
ATRESIA/STENOSIS OF LARGE INTESTINE, RECTUM AND ANAL CANAL	751.2
GENITAL ANOMALIES	752
RENAL ANOMALIES	753.0-753.1
REDUCTION DEFORMITIES OF LIMBS	755.20-755.39
CONGENITAL DIAPHRAGMATIC HERNIA	756.6
GASTROSCHISIS/OMPHALOCELE	756.79
CHROMOSOMAL ANOMALIES	758
EAR	
» ANOTIA/MICROTIA	744.01, 744.23
» HEARING LOSS	*(referral via RI Hearing Assessment Program)*
LUNG	
» CONGENITAL CYSTIC LUNG	748.4
» AGENESIS, HYPOPLAYSIA AND DYSPLASIA OF LUNG	748.5
CONGENITAL TUMORS	140-239
DEVELOPMENTAL CONDITIONS	**ICD-9-CM CODE**
AUTISM	299.0

Collaborative Research

National and International Studies

The RIBDP has participated in, or is currently participating in, a variety of national and international collaborative studies to gain a better understanding of specific birth defects. Examples of these collaborative research studies, their organizational sponsors, and purpose are described in Table 7. In 2009, Rhode Island joined the other New England states to form the New England Birth Defects Consortium, whose mission is to improve services for infants and children in New England with birth defects by promoting regional collaboration through data sharing, research activities, prevention activities, and health care quality improvement.

Table 7: National and International Collaborative Research Studies

STUDY/PROJECT	SPONSOR	PURPOSE/RESEARCH QUESTIONS
INTERNATIONAL DATABASE ON CRANIOFACIAL ANOMALIES (IDCFA)	WORLD HEALTH ORGANIZATION (WHO)	TO COLLECT AND DISSEMINATE DATA ON CRANIOFACIAL ANOMALIES (ORAL CLEFTS) TO STIMULATE RESEARCH FOR THE DEVELOPMENT OF PREVENTION STRATEGIES AND A BETTER UNDERSTANDING OF THE CHARACTERISTICS ASSOCIATED WITH THESE ANOMALIES.
PRETERM BIRTHS AND BIRTH DEFECTS	NATIONAL BIRTH DEFECTS PREVENTION NETWORK (NBDPN)	TO DETERMINE WHAT PERCENTAGE OF PRETERM AND LOW BIRTH WEIGHT BIRTHS HAVE BIRTH DEFECTS; AND WHETHER THERE IS AN INCREASED RATE OF PRETERM DELIVERY FOR INFANTS BORN WITH BIRTH DEFECTS.
NEURAL TUBE DEFECTS AND INFANT MORTALITY	NATIONAL BIRTH DEFECTS PREVENTION NETWORK (NBDPN)	TO EXAMINE THE IMPACT OF FOLIC ACID FORTIFICATIONON NEURAL TUBE DEFECT-SPECIFIC INFANT MORTALITY; WHETHER A DECLINE IN NEURAL TUBE DEFECT-SPECIFIC INFANT MORTALITY HAS CONTRIBUTED TO THE DECLINE IN OVERALL INFANT MORTALITY; AND IF THE SEVERITY OF NEURAL TUBE DEFECTS HAS CHANGED OVER TIME.
GASTROSCHISIS/ VENTRAL WALL DEFECTS	NATIONAL BIRTH DEFECTS PREVENTION NETWORK (NBDPN)	TO DETERMINE THE PREVALENCE AND TRENDS OF SPECIFIC VENTRAL WALL DEFECTS IN THE UNITED STATES
NATIONAL PREVALENCE ESTIMATES	NATIONAL BIRTH DEFECTS PREVENTION NETWORK (NBDPN)	TO MONITOR TRENDS AND DETERMINE DIFFERENCES BETWEEN STATES AND REGIONS.
CLUBFOOT	NATIONAL BIRTH DEFECTS PREVENTION NETWORK (NBDPN)	TO ESTIMATE THE PREVALENCE OF CLUB FOOT AND INVESTIGATE ITS RISK FACTORS

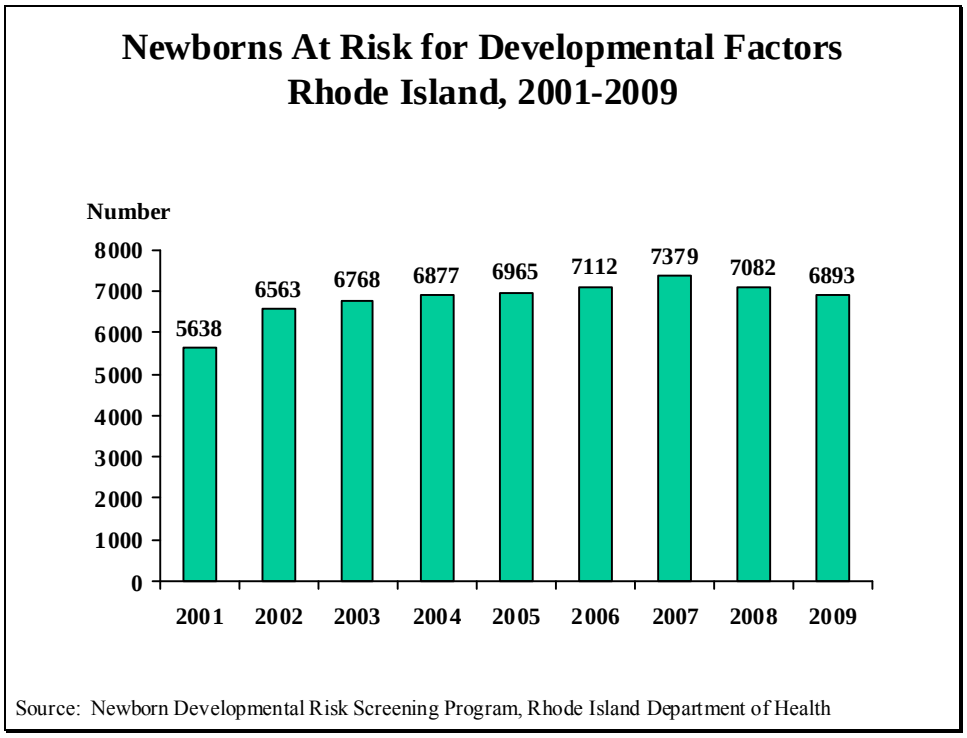
Resources

Many children with birth defects are evaluated and followed at the Genetics Counseling and Child Development Centers at Rhode Island Hospital. Clinics are available for most birth defects, including meningomyelocele, Down Syndrome, inborn errors of metabolism, and other syndromes. The Cardiology Clinic is a pediatric specialty clinic at Hasbro Children's Hospital. Extremely rare conditions are referred to Boston specialists.

Identification of Babies at Risk: Newborn Developmental Risk Screening

Data from the Newborn Developmental Risk Screening Program indicate that in 2009, 6,893 (62.0%) of the Rhode Island babies screened for developmental risks, were determined to be at risk for developmental delays. This is a slight decrease from the 7,082 (60.6%) of newborns determined to be at risk for developmental factors in Rhode Island during 2008 (Figure 97). A baby is determined to be at risk if they have any one of the following criteria: a known established condition; birth weight less than 1,500 grams; a neonatal intensive care unit (NICU) hospitalization greater than 48 hours; or the mother is Hepatitis B Surface Antigen (HBSG) positive. A baby may also be determined to be at risk if they meet at least two of the following criteria: mother's age is less than nineteen or greater than 37; mother's and/or father's education is less than 11th grade; mother is not married; no previous live births; five previous live births; presence of at least one family history risk factor; number of prenatal visits before 36 weeks is less than 6 or total number of prenatal visits is less than 10; no prenatal care visits before the fifth month; gestational age is greater than 37 weeks and birth weight is between 1,500 and 2,500 grams; APGAR scores are less than 7 at one and five minutes.

Figure 97



Geographic Disparities

Babies born to families residing in the core cities were more likely determined to be at risk for developmental factors than those residing in the rest of the state (Figure 98). Data from the Newborn Developmental Risk Screening Program indicate that among the 6,893 newborns identified at risk for developmental factors during 2009, 4,074 (59.1%) lived in the core cities. The proportion of babies born at risk is greater among the core cities (75.9%) than the rest of the state (49.1%). The percentage of newborns determined to be at risk varies within the core cities, ranging from 58.5% in Newport to 86.7% in Central Falls.

Figure 98

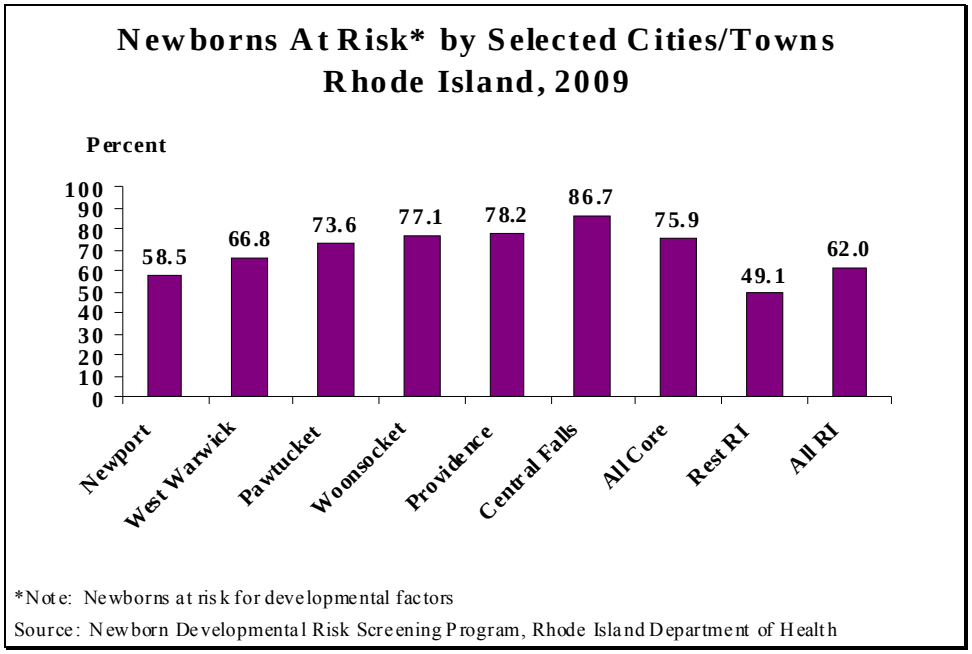
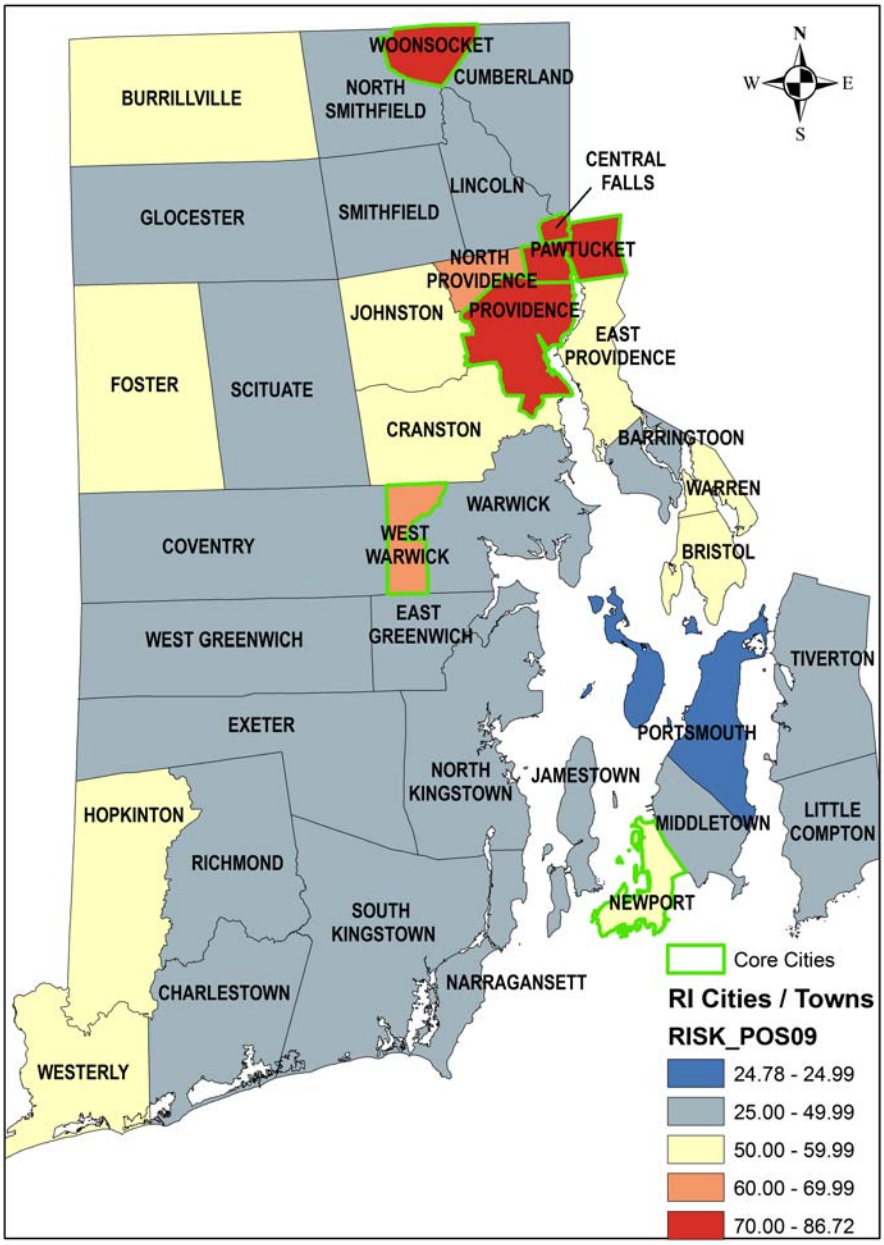


Figure 99 shows the percent of newborns at-risk for developmental factors throughout the state during 2009.

Figure 99

Percent of Newborns At-Risk for Developmental Factors, Rhode Island, 2009



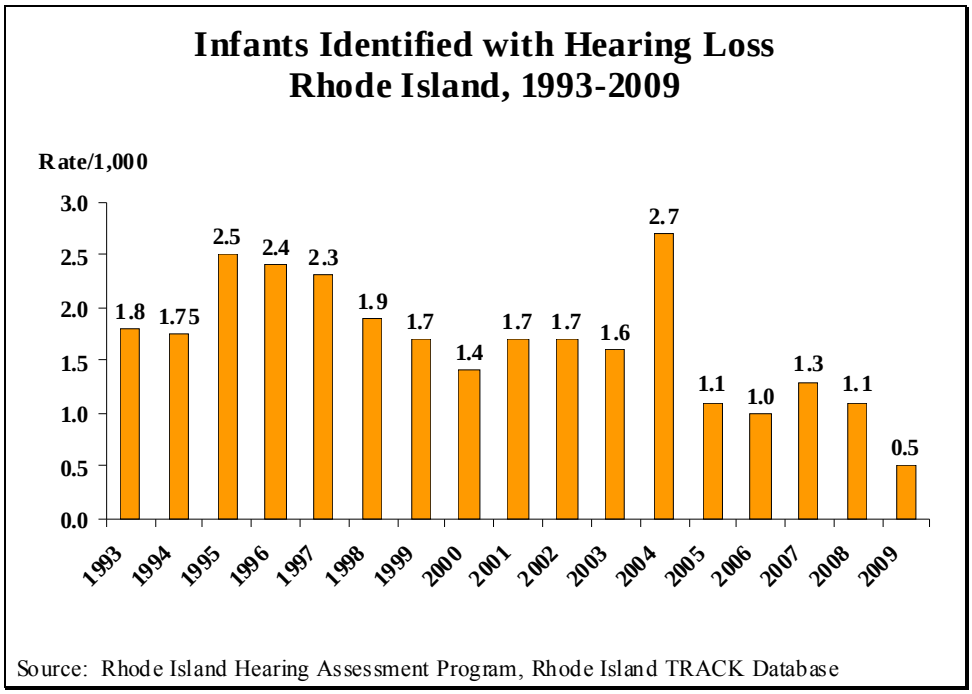
Home Visiting

Newborns that are determined to be at risk are offered home visits and are provided referrals to appropriate services. During 2005, 6,965 babies were identified as at-risk and of these, 3,888 (55.8%) received a home visit within the first three months of birth. This figure represents a decrease from 2004 when 59.6% of at-risk babies received a home visit within three months of birth.

Universal Newborn Hearing Assessment

During 2009, of the 12,112 babies born in Rhode Island, 12,077 (99.7%) were screened for hearing and 7 (0.5 per 1,000) were identified with hearing loss. This hearing loss rate is the lowest since 1993 and represents a 55% decrease from the 2005 rate of 1.1 (Figure 100).

Figure 100



Diagnostic Audiologic Evaluations

During 2009, of the 12,077 infants screened for hearing loss, 57 (4.7 per 1,000) were referred for a Diagnostic Audiologic Evaluation (DAE) and 47 (82.5%) received a DAE. More than two-thirds of the infants who received a DAE, 49 (70%) were evaluated before three months of age. The average age of the 22 infants identified with permanent hearing loss was 2.9 months.

Early Intervention (EI)

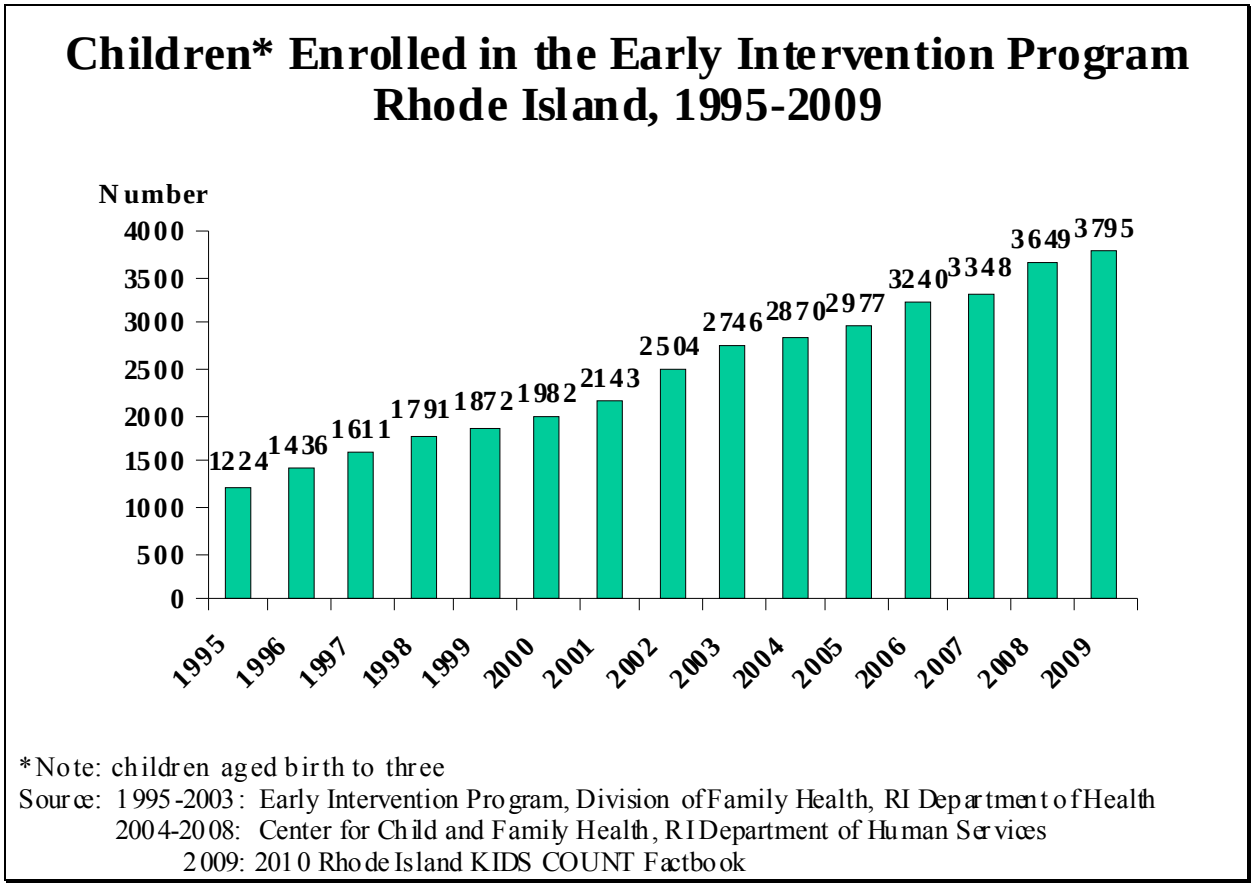
The number of children, aged birth to three, enrolled in the Early Intervention (EI) Program continues to rise in Rhode Island. During 2008, 3,649 children aged less than three were enrolled in the Rhode Island Early Intervention Program, representing 9.7% of all Rhode Island children aged less than three. This 2008 enrollment figure is a 33% increase from 2003, when 2,746 children were enrolled in the Early Intervention Program. According to the 2010 Rhode Island KIDS COUNT, in 2009 this number increased to 3,795 children enrolled in EI services (Figure 101). This number signifies that 10% of the 37,775 children under age three in Rhode Island received EI services in 2009. Additionally enrollment was higher in core cities (11%) than in other areas of the state (9%).

In 2009, 63% of children enrolled in the EI program were male compared to 37% which were female; age groups were more evenly represented in enrollment as 31% were children ages birth – 11 months, 35% were aged 12– 23 months, 33% were aged 24 – 35 months and lastly fewer than 1% were aged more than 36 months. These children were served by a total of ten certified EI provider agencies throughout the state. (Source: 2010 Rhode Island KIDS COUNT Factbook)

As of 2008, Rhode Island ranked 4th in the country (1st is best) and 2nd in New England (1st is best) for the percentage of children aged less than one receiving early intervention services (2.2%). Rhode Island also ranked 4th in the country and 2nd in New England for the percentage of children aged less than three receiving early intervention services (4.8%). (Source: 2010 Rhode Island KIDS COUNT Factbook).

Many factors have resulted in this enrollment increase in Rhode Island, including earlier identification of children requiring early intervention services. Programs such as Newborn Developmental Risk Screening and Family Outreach have contributed to the early identification and referral of children to the Early Intervention Program. Additionally, the survival of very low birth weight infants and the increase in multiple gestation births have also contributed to the increases in EI enrollment. It should be noted that in 2004, the EI Program was transferred from the Rhode Island Department of Health to the Department of Human Services.

Figure 101



Children are eligible for Early Intervention if they have an established risk (e.g., Down syndrome), biological/medical risk (e.g., failure to thrive), or environmental risk (e.g., poverty). Among the 3,795 participants in the Early Intervention Program during 2009, nearly three quarters (73%) had a significant developmental delay, 19% had a single established condition, and 8% had multiple established conditions; no information was available for less than 1%.

According to national research, between one-third to one-half of abused or neglected young children exhibit developmental delays making them eligible for enrollment in EI programs. During 2009, of 784 children aged less than three who were victims of a substantiated case of abuse or neglect, 66% (514) were considered eligible and referred for Early Intervention services by the Rhode Island Department of Children, Youth and Families (DCYF) in accordance with federal legislation. (Source: 2010 Rhode Island KIDS COUNT Factbook).

During 2009, 931 children were discharged from EI at the time they reached age three. Of these children, 68% were eligible for enrollment in preschool special education, while 14% were not eligible and 13% had undetermined eligibility for such services. The remaining 5% achieved the goals of their service plan were withdrawn by a parent or guardian,, moved out of state or were unreachable. (Source: 2010 Rhode Island KIDS COUNT Factbook)

In Rhode Island, during the 2007-2008 school year, there were the highest number of public school students with IEPs in the nation. One in five or 20% of Rhode Island public school students had IEPs compared to more than one in eight or 12% nationally

Special Education

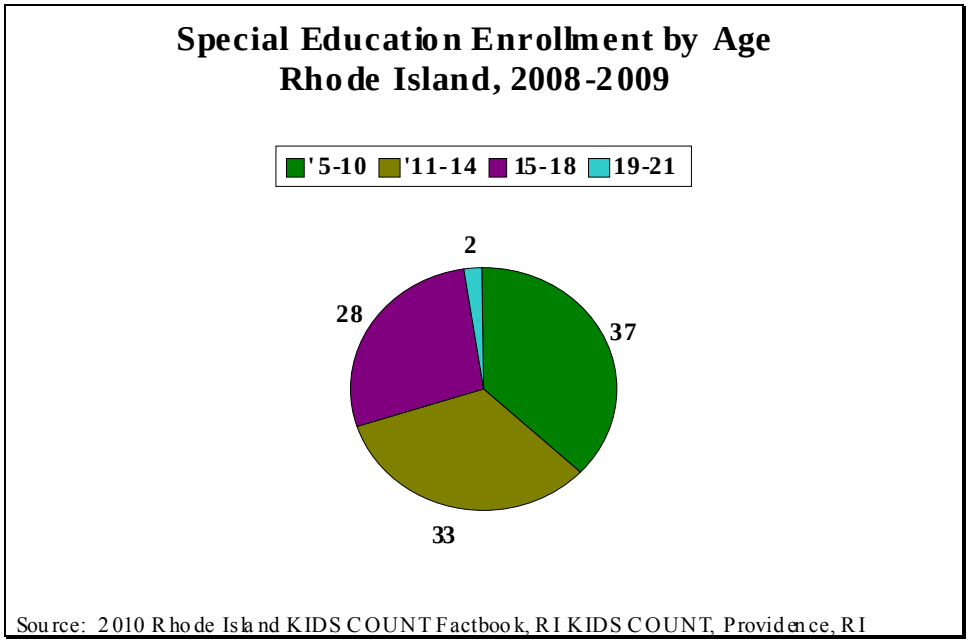
The number of children ages 3-21 with disabilities who receive special education services has continued to decrease. According to the 2010 Rhode Island KIDS COUNT Factbook, during the 2008-2009 school year, there were 24,302 (17%) Rhode Island children, ages 3-21, with disabilities who received special education services.

Of those who received special education services, 41% were classified as learning disabled. This represents a significant decrease from the 1998-1999 academic year, when 69.7% of special education students were classified as learning disabled. Other special education students were enrolled during 2008-2009 because they were health impaired (17%); speech impaired (16%); had an emotional disturbance (10%); had an autism spectrum disorder (6%); were mentally retarded (4%); or had other disabilities (5%).

In 2008-2009, children between the ages of five and ten years old accounted for more than one-third (37%) of all children enrolled in special education. The age distribution of students aged 11-21 are as follows: ages 11-14 (33%), ages 15-18 (28%) and ages 19-21 (2%) (Figure 102). Additionally, there were 2,635 preschool students enrolled in special education programs in Rhode Island; of these students nearly half (46%) had speech or language impairments, 40% had developmental delays, 7% had an autism spectrum disorder and the remaining 7% had other disabilities.

The local school system is responsible for identifying and evaluating students between the ages of 3 and 22 with disabilities and who might require special education. In Rhode Island, special education students achieve lower on state assessments, and are much less likely to graduate high school than their non-disabled peers. Nearly half (48%) of students with disabilities enrolled in special education were substantially below proficient in state assessments compared with 8% of their non-disabled peers. Both nationally and in Rhode Island, special education students graduate from high school far less than regular education students. In 2009 specifically, the four-year graduation rate was 59% for special education students compared to the overall state rate of 75% (Source: 2010 Rhode Island KIDS COUNT Factbook).

Figure 102



Rhode Island Pediatric Practice Enhancement Project (PPEP)

The Pediatric Practice Enhancement Project is a collaborative initiative between the Department of Health, Department of Human Services and Rhode Island's special needs service delivery system. Parent consultants are assigned a practice and use their knowledge to educate, advocate and assist families of children with special health care needs in accessing community resources. These parent consultants also have a relationship with each CEDARR Family Center to facilitate timely assessment and a fast track to coordinated care.

The number of families with children with special with health care needs served by PPEP has risen sharply from 740 in 2005 to 3,209 in 2008. Based on the estimated 41,783 children with special with health care needs in Rhode Island, the percentage of CSHCN served by PPEP has risen from 1.8% to 7.7%.

Between 1/1/2004-5/30/2007, 1,428 children and their families were served by PPEP. One in five (20%) of the children had a diagnosis related to behavioral health. Other diagnoses included: orthopedic disorders (13%), developmental delays (12%), congenital anomalies (10%), cardiac disorders (7%), autism spectrum disorders (6%), respiratory disorders (6%), etc. PPEP worked with families on a range of issues or problems related to the following: education (22%), mental/behavioral health, special evaluation (17%), health insurance (9%), recreation/social (7%), general parenting (7%), housing (5%), medical equipment (5%), food/clothing (4%), nutrition (3%) and child care (2%). Approximately, 80% of the problems families presented were resolved; and reasons why 20% of the problems were not resolved include the family refused services (7%), system barriers (12%) and unable to reach the family (1%).

During FY09, a study was conducted to compare health service utilization and health related expenditures between PPEP and the standard care model for CSHCN in Rhode Island. Claims data from Neighborhood Health Plan of RI and PPEP case management data were linked to examine CSHCN encounters, claims per visit and

expenditures per claim for the two models of care. The study focused on outpatient, emergency visits and inpatient hospitalizations to determine: 1) whether PPEP is associated with lower emergency department and inpatient service use, and higher utilization of primary care/preventive services; and 2) if there are differences in paid claims between PPEP and standard of care models. Results show that on average, PPEP encounters per child were 20.9% higher and claims per visit were 3.9% lower compared to standard care. Overall and annual expenditures per visit were lower for PPEP. These findings suggest that the PPEP model increases utilization of primary/preventive care and that a higher use of these services may decrease utilization of more costly services. Utilization and costs were lower for inpatient admissions, while utilization was higher and costs lower for emergency department visits. The use of outpatient services was mixed, with PPEP showing higher visits per child and lower claims per outpatient visits.

Children with SSI

The Rhode Island Medicaid program purchases health, behavioral health, and residential services for children with disabilities. Children with disabilities include children with: physical disabilities, developmental disabilities, serious emotional disturbances, and foster children with disabilities. Children with disabilities experience a broad range of chronic conditions that include differences in clinical manifestation, severity, and impact on age-appropriate activities such as growth, play, and learning. Children with the following diagnoses are among those who meet the Social Security Income (SSI) criteria for disability:

☐ AIDS	☐ Severe asthma
☐ Spina bifida	☐ Leukemia
☐ Cerebral palsy	☐ Cystic fibrosis
☐ Downs Syndrome	☐ Multiple congenital anomalies
☐ Serious emotional disturbances	☐ Juvenile diabetes
☐ Autism	☐ Severe depression
☐ Brain injury	☐ Severe respiratory disease

Children with disabilities often receive a broad range of services that include home and community-based services; behavioral health services; and/or hospital-based acute care services. They receive services from a range of pediatric specialists, and most of these services are provided at tertiary care centers, specifically teaching hospitals. Because their care needs are often very complex, many children with disabilities do not have community-based primary care providers, but rely on specialists for much of their primary care. One of the biggest challenges in serving these children is preparing them for life as young adults, maximizing their potential to work and live independently.

Another area where children with disabilities seem to receive fewer services than other children, or even other adults with disabilities is dental care. Children with special health care needs may have problems finding and accessing providers who are trained and equipped to address their special dental, medical and mobility needs. A dental home can provide comprehensive, continuously accessible, coordinated and family-centered oral health care.

Children Receiving Medical Assistance

Children and youth who are in the welfare system are more likely to have special needs when compared to other children. These special needs may include behavioral and emotional problems. Developmental delay, and serious health problems such as chronic illnesses and disabilities. Children and youth who meet certain disability criteria are eligible for Medicaid and/or cash assistance through the federal Supplemental Security Income (SSI) program. As of December 31, 2008, 2,626 children in Rhode Island were enrolled in Medical Assistance due to their foster care status and 2,548 children were enrolled because of special needs adoptions. Rhode Island youth who are in substitute care on their 18th birthday are provided with RIte Care health insurance coverage until their 21st birthday through the Post Foster Care Medical Assistance provision.

Since 1997, children with special needs in Rhode Island that receive Medical Assistance have had increased access to a wide variety of health services as well as a decrease in the use of emergency hospital services. The number of children and youth aged less than 21 in Rhode Island who receive Social Security Income (SSI) has been rising. In December 2009, 5,805 children and youth living in Rhode Island received Medical Assistance Benefits through Supplemental Security Income (SSI), according to the 2010 Rhode Island KIDS COUNT Factbook. Additionally, as of December 2009, 1, 346 Rhode Island children 19 and younger are receive Medical Assistance Benefits through enrollment in the Katie Beckett Provision – which is an eligibility provision providing coverage that allows children with serious disabling conditions to be cared for at home. (Source: 2010 Rhode Island KIDS COUNT Factbook).

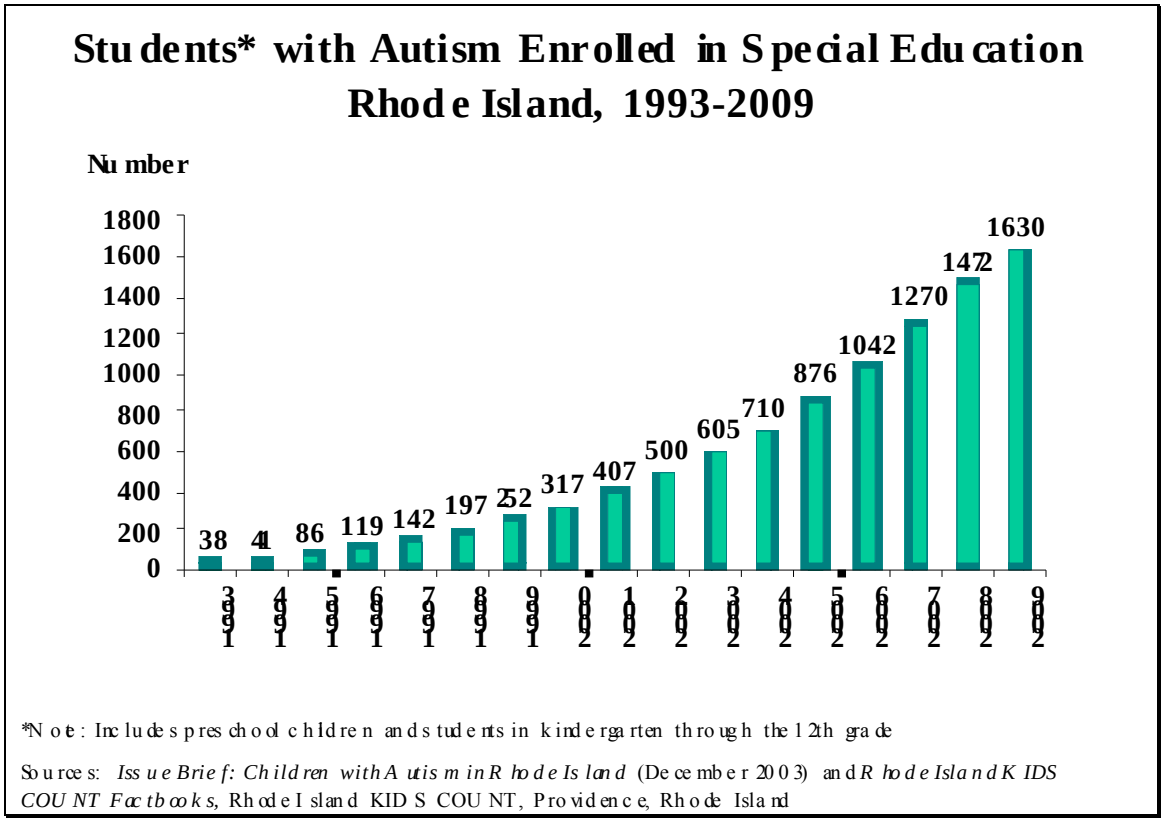
Autism

More children in Rhode Island and nationally are being diagnosed with autism, which is a neurological disorder that affect's a child's ability to communicate, process and respond to sensory information, and form social relationships. Those diagnosed with Autism Spectrum Disorders (ASDs) have a range of symptoms and abilities and experience challenges that range widely in severity.

Children Aged 3-21

In Rhode Island between 1993 and 2009, the number of children aged 3-21 with autism and enrolled in special education rose from 38 to 1,630, according to the 2010 Rhode Island KIDS COUNT Factbook (Figure 103). During the 2007-2008 academic year, the number of Rhode Island children aged 3-21 with autism rose to 1,472, representing a 15.9% increase from 2007, when there were 1,270 special education students with autism. The reasons for the increasing numbers and rates of autism are not yet understood. They could be a result from improved awareness and diagnosis, a broadened definition, increased prevalence, or a combination of factors. According to the Rhode Island KIDS COUNT Issue Brief: "*The Prevalence of Autism in Rhode Island*" (December 2003), during the past ten years in Rhode Island, there has not been a decline in other categories of disability in the special education census of a magnitude that might account for the increase in autism rates.

Figure 103



During the 2007-2008 school year, the proportion of Rhode Island students in kindergarten through the 12th grade who were enrolled in special education who have autism was 8.8 per 1,000. This represents an 18.9% increase from 7.4 per 1,000 in 2006-2007. Students living in the core cities were less likely to have autism and be enrolled in special education (6.6) compared to students living in the rest of the state (10.1).

The number of children identified with autism for purposes of special education peaks between age 6 – 13, raising concerns about early identification and the appropriateness of services provided to younger children with autism.

Autism as a Sentinel Condition in the RI Birth Defects Program

The Rhode Island Birth Defects Program has identified a set of sentinel conditions for outreach and follow-up. Autism has been included as one of the sentinel conditions. As described earlier, the Birth Defects Program identifies and follows children with birth defects until age five. The Birth Defects Program is working closely with the Office for Families Raising Children with Special Health Care Needs and health care providers to improve identification of these children to assure they receive the services they need.

Traumatic Brain Injury

On July 1, 2007, rules and regulations pertaining to the Rhode Island Traumatic Brain Injury (TBI) Registry of the General Laws of RI became effective. The regulations mandate hospitals in RI to report to the RI Department of Health all cases of TBI diagnosed through inpatient and the ED within 14 days of diagnosis. RI TBI registry data include: principal diagnosis; cause of injury; place of incident; type of discharge; date of admission/discharge; and, patient demographics (name, address, SSN, DOB, gender, race, and ethnicity).

TBI Service Linkage Program utilizes registry data to: 1) increase the State's surveillance capacity to measure the incidence of TBI; and, 2) to connect TBI survivors and their family members with community-based services and resources.

In the U.S., approximately 1.7 million people sustain a TBI each year (2002-2006 average), 52,000 die, 275,000 are hospitalized, and 1.365 million are treated and released from an ED. According to 2009 RI Traumatic Brain Injury Program data there were 6,585 TBIs - 44.5% (2,862) were among females and 55.5% (3,719) were among males. Of this number, 2,184 occurred in children under 19 years of age.

The leading causes of TBI in RI were unintentional falls (45%), motor vehicle traffic accidents (15%), striking against / struck accidentally (15%), assaults (8%), and other/unknown (17%).

Transition of Adolescents with Special Health Care Needs to Adult Health Care

Healthcare Transition, the process of change from child and family-centered healthcare to adult healthcare, is a critical part of the Medical Home concept. The goal of this transition for young adults with special healthcare needs is "to maximize lifelong functioning and potential through the provision of high-quality, developmentally appropriate healthcare services that continue uninterrupted as the individual moves from adolescence to adulthood." (Source: American Academy of Pediatrics, American Academy of Family Physicians, and American College of Physicians – American Society of Internal Medicine. A consensus statement on health care transition of young adults with special health care needs. Pediatrics 2002;110:1304-1306)

In Rhode Island, youth with special needs are much less likely than youth without special needs to finish high school, go on to post-secondary education, find employment or live independently. (Source: 2010 Rhode Island KIDS COUNT Factbook) According to the 2005-2006 National Survey of Children with Special Health Care youth with special health care needs who receive the services necessary to make appropriate transitions to adult health care, work, and independence were 37.6% of the Rhode Island population compared to 41.2% of the same population nationally.

The 2007 Rhode Island Youth Risk Behavior Survey (YRBS) reports that the 23% of students who identify themselves as having a disability, are also more likely to smoke, drink, and use marijuana by high school and continue these behaviors throughout high school. Also, students with disabilities are more likely to have mental health problems, report feelings of hopelessness and to consider and attempt suicide. These students according to survey responses are also more likely to be in physical danger, be forced to have sex and feel both threatened and unsafe. Students with disabilities in Rhode Island are more likely to be overweight and get insufficient exercise compared to their non-disabled peers.

In 2006-2007, the Rhode Island Department of Health's Office of Special Healthcare Needs (OSHCN) conducted a series of pediatric and adult primary care surveys to understand and identify current policies, practices, beliefs, and service delivery gaps related to the transition and transfer of youth with special healthcare needs from pediatric care to adult primary care. The surveys were distributed to all (599) practicing adult primary care physicians practicing in Rhode Island and are based on a total of 289 completed surveys. The respondents represented three groups of physicians, those practicing internal medicine, those in family practice with non-continued care and those in family practice with continued care.

Results of the 2006-2007 survey questionnaires indicated that the entry of young adults into an adult primary care practice is typically initiated by family members or friends. Additionally the majority of respondents reported higher levels of comfort in treating young adults with obesity, hypertension and diabetes than treating young adults with sickle cell, spina bifida, cystic fibrosis, neuromuscular disease, and young adults who are technology dependent. The family practice physicians who provide continued care reported significantly higher comfort levels in treating young adults with mental health conditions (67%), cardiac conditions (70%), Down syndrome (74%), mental retardation (78%), autism (59%), and paraplegia (70%) than internists or physicians of non-continued care family practices. However, the internal medicine physicians reported a significantly higher level of comfort in treating technology dependent young adults (30%) compared to physicians in continued and non-continued care family practices, 15% and 16% respectively.

In response to questions about the transfer and transition processes, the surveys indicated that the majority of physician respondents, 79% thought that young adults with special healthcare needs should be transferred to adult primary care by age 21. A total of 77% reported they never or rarely received a written transfer summary from the pediatric healthcare provider for their patients with special healthcare needs and 69% reported they never or rarely communicate with the patient's pediatric care providers. Additionally concerning their patients with special health care needs, 94% indicated that health plans never or rarely assist with the transfer and 47% reported that young adults with special healthcare needs in their practice always or sometimes experience gaps in care during the transfer from pediatric to adult care.

3F. WOMEN THROUGH THE LIFE COURSE

Priority populations associated with maternal and child health programs typically do not include information about women beyond reproductive years. Because the Rhode Island Department of Health has adopted a life course framework and we have included relevant information about this population through out the needs assessment process, we feel it is important to acknowledge some of this information here. As previously presented, both discrete and chronic conditions experienced earlier in life may impact health and well-being later in life. For older women, prolonged exposure to conditions associated with living in poor and dilapidated housing early in life may impact the progression and/or development of various health conditions later in life. Additionally, health practices and behavior may have a cumulative impact on subsequent health depending on frequency and length of time that an individual engages in such behavior. Following, we have highlighted some of the relevant information for women at various stages of the life course.

Cancer Screening

No Pap in Past 3 Years for Women 18+

In 2008, according to the Rhode Island Behavioral Risk Factor Surveillance System (BRFSS), the percent of women age 18 and older who report having had a pap smear within the last three years, 86.1% of Rhode Island women compared to the national average of 82.8%. National data from 2006, show highest rates of screening for black women (87.2%), followed by white (84.5%) and Hispanic (81.6%) women. Lowest rates are reported nationally for Asian/Pacific Islanders with 75.6% of women reporting having had a pap smear in the past three years. Data for Rhode Island women are higher than the national average for each group where data are available—Hispanic (90.5%), white (90.0%), and black (89.5%) women.

No Mammogram in the Past 2 Years for Women 40-64

In 2008, according to the Rhode Island Behavioral Risk Factor Surveillance System (BRFSS), the percent of women age 40 and older who report having had a mammogram within the last two years, 81.8% of Rhode Island women compared to the national average of 76.0%.

Health Practices and Behavior

Physical Activity

According to 2007 BRFSS, only 50.5% of Rhode Island women reported having the CDC recommended level of weekly physical activity. The CDC recommends moderate-intensity activities in a usual week (i.e., brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate) for at least 30 minutes per day, at least 5 days per week; or vigorous-intensity activities in a usual week (i.e., running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate) for at least 20 minutes per day, at least 3 days per week or both. This can be accomplished through lifestyle activities (i.e., household, transportation, or leisure-time activities). The rate for RI women is slightly higher than the National rate for women of 47%.

Tobacco Use

The relationship between smoking and illness, particularly lung cancer, the leading cause of cancer mortality among women, is well documented. Smoking is more common among men than women, but takes an enormous toll on both sexes. High quantity and duration of smoking have been shown to have adverse effects on several health conditions, including cancer, heart disease, stroke, and respiratory illness. For women, there are strong negative effects on fertility and pregnancy.

The RI Tobacco Control program's implementation of "best practices" has resulted in high cigarette prices and reduced tobacco use prevalence. Nonetheless, smokers are a high risk population and tobacco use is still the leading preventable cause of death and illness in the state. On-going comprehensive tobacco control program efforts are required to continue reduction of tobacco use in Rhode Island.

According to 2006-2008 BRFSS, the percentage of all women in Rhode Island, age 18-64 who are current smokers is 19.5%. Looking at race and ethnicity separately, the highest rate of current smokers are among white women (20.3%), followed by black women (17.4%), all minority grouped together (20.0%), and lastly, Hispanic women (13.0%).

Health Status: Chronic Diseases

Asthma

According to the 2008 US and State BRFSS, RI has a higher prevalence of asthma than the national average. However, adult asthma rates in Rhode Island have remained stable since 2000 with no significant differences from one year to the next. An estimated 83,448 Rhode Island adults aged 18 and older currently have asthma, about 10.5% of the state adult population, versus 8.8% nationally. (Source: RI BRFSS, 2008; US BRFSS, 2008) According to the 2008 Rhode Island Behavioral Risk Factor Surveillance System (RI BRFSS), women have a higher prevalence of current asthma (12.8%) compared to men (8.1%).

Obesity

The proportion of adults who are overweight or obese has increased markedly in the past two decades, both nationally and in Rhode Island. These increases will likely lead to increases in obesity associated diseases. Overweight is defined as having a body mass index (BMI) of 25 or greater but less than 30; obesity is defined as having a BMI at or above 30.

According to the 2008 Behavioral Risk Factor Surveillance System (BRFSS), women in Rhode Island were more likely to be overweight compared to women nationally (31.5% vs. 29.7%, respectively) but less likely to be obese (21.9% vs. 25.6%, respectively). White non-Hispanic women (21.3%) were significantly less likely to be obese than either Black non-Hispanic (37.5%) or Hispanic (32.0%) women. The prevalence of obesity was lower for women of higher education, and for women of higher income. Women who are college graduates reported the lowest obesity proportion (18.5%) while women with a high school education have the highest obesity proportion (27.9).

Diabetes

The adult diabetes population in Rhode Island closely resembles the nation‘s increasing trends. There has been a statistically significant upward trend in diabetes prevalence, from 5.4% in 1993 to 7.2% in 2007. This is a 33% increase in the number of Rhode Island adults with diabetes, from about 42,000 in 1993 to about 60,000 in 2007. The percentage of women reporting diabetes is slightly lower (7.0%) compared to men (8.0%).

Adding to this burden of diabetes, is the large number of individuals with pre-diabetes, a condition where individuals have blood glucose levels higher than normal, but not high enough to be classified as diabetes. Specifically, the Centers for Disease Prevention and Control has reported that 40.1% of adults in the United States aged 40-74 have been diagnosed with pre-diabetes. This pre-diabetic condition raises the risk of type 2 diabetes, heart disease, and stroke, which all intensifies the rising epidemic of diabetes.

A high percentage of persons with diabetes report high blood pressure (67%), high cholesterol (61%), and/or indicators of cardiovascular disease (heart attack 16%, angina/coronary heart disease 17%, stroke 8%); 43% of persons with diabetes report being disabled; and, more than half (53%) of persons with diabetes have never taken a class on how to manage their diabetes and 68% have not attended a diabetes education session with a health professional within the past 6 months. (Source: 2008 Rhode Island Department of Health Diabetes Health Profile).

Cancer

Differentials in cancer rates by gender are expected. They can be related to internal factors that differ between males and females, such as reproductive systems, or to external factors, such as historical lifestyle differences (i.e., occupational exposures to carcinogens, historical trends in smoking). In both Rhode Island and the nation as a whole, the burden of cancer is higher among men than women. This disparity is largely attributable to cancers of the colon-rectum, lung-bronchus, and urinary bladder.

In recent years, cancer incidence has been lower among African American women than white women in Rhode Island, paralleling the nation's experience. In contrast to the nation, however, cancer mortality is also slightly lower among African American women than white women in Rhode Island. The three leading cancers for females in Rhode Island by race are breast, lung & bronchus, and colon & rectum. Data from the RI Cancer Program from 2002-2006 show white women having consistently higher rates (per 100,000) than black women (breast—129 vs. 94; lung & bronchus—63 vs. 61; and, colon & rectum—46 vs. 42; respectively). (Source: 2008 Rhode Island Department of Health Cancer Registry Surveillance Report)

Heart Disease

In Rhode Island, in 2008, an estimated 8% of adults had one or more cardiovascular diseases. More specifically, 4.5% of Rhode Island adults had coronary heart disease, 4.0% of Rhode Island adults have had a heart attack, and 2.3% of Rhode Island adults have had a stroke.

The prevalence of cardiovascular disease is six times higher for Rhode Island adults aged 65 and older than for Rhode Island adults aged 18–64 (24% vs. 4%). Cardiovascular disease is significantly higher in men (9.1%) than

in women (7%). Men are at greater risk of heart disease and stroke at age 55 and older, whereas women have greater risks for these diseases at age 65 and older.

Non-Hispanic Whites older than age 65 are more likely to die of heart disease than non-Hispanic Blacks and Hispanics in the same age group, regardless of gender. However, between 2000 and 2007, the age-adjusted hospitalization rate for heart disease and stroke was higher among non-Hispanic Blacks than those of non-Hispanic White or Hispanic descent. This may be due to differences in access to care or early detection of heart disease and stroke, which result in hospitalization at a later point in time. Non-Hispanic Blacks are also more likely to have two or more risk factors for heart disease and stroke than those of non-Hispanic White or Hispanic descent.

Other disparities include income and education. The prevalence of heart disease and stroke among adults with an annual household income less than $25,000 is more than double that of adults with higher household incomes (14%vs. 6%, respectively). Similarly heart disease and stroke rates among Rhode Island residents with less than 12 years of education is nearly double that of residents with 12 or more years of education (15%vs. 7%, respectively). (Source: Heart Disease and Stroke Prevention: Rhode Island State Plan 2009)

HIV

Of the 1102 HIV cases diagnosed and reported to Rhode Island Department of Health from January 1, 2000 – December 31, 2007, females accounted for 28% of cases. Among women, African Americans accounted for the majority of cases (39%), followed by Hispanics (28%) and Whites (28%) and the majority of the cases were from Providence county. The majority of cases were between the ages of 30 and 39 (40%) and heterosexual contact is the leading mode of exposure for women (43% of cases), followed by 'No Risk Specified' (39%). (Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Sexually Transmitted Infection Rates

Gonorrhea

There were 307 cases of gonorrhea reported in 2008. This represents a 24% decrease from the 402 cases reported in 2007. There has in fact been a steady decrease in the reported cases of gonorrhea since 2003, when a peak of 973 cases was reported. The increased use of sensitive nucleic acid amplification tests beginning in the late 1990's, along with increases in STD screening for females has lead to increased gonorrhea case finding, especially among the asymptomatic. This initially was reflected in a period when the number of reported gonorrhea cases in Rhode Island began to increase and reached a peak in 2003. In 2007, the incidence of gonorrhea for females was 135 (per 100,000) and 172 for males. (Source: 2008 Rhode Island Department of Health Program Data)

Chlamydia

There were 3,317 cases of chlamydia reported to HEALTH in 2008. This represents a 4% increase from the 3,177 cases reported in 2007. Like in past years in Rhode Island, females in 2008 accounted for almost two-thirds of the chlamydia cases. The incidence rate for females was 2,399 (per 100,000) and 916 for males. The discrepancy between males and females is likely due to the routine practice of screening for chlamydia in females rather than the lack of infections in males. Treating partners (and preventing re-infection of females) remains a challenge.

The rates of chlamydia infection are higher among African American people than Hispanics and White, which is similar to the HIV infection and the gonorrhea distribution among the people of different race and ethnicity. The transmission of HIV and most of the sexually transmitted diseases involves engagement in similar high risk sexual activities among similar sexual networks. Unlike gonorrhea, where the discrepancy between African American gonorrhea rates and the other race/ethnicity gonorrhea rates has decreased, the discrepancy between African American chlamydia rates and the other race/ethnicity chlamydia rates has for the most part remained consistent. In 2008, African-Americans had the highest rate of Chlamydia (1,384 per 100,000), followed by Hispanics (918), Asians (358), and lastly, whites (161), compared to overall RI incidence of 314 (Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile).

Infectious Syphilis

Rhode Island, like many other parts of the country, has seen an increase in reported cases of infectious syphilis. In 2006, Rhode Island‘s rate of primary and secondary syphilis ranked thirty fourth in the nation at 1.3 cases/100,000 population. This was after three straight years of Rhode Island being ranked in the top twenty states with the highest burden of disease. In 2007, the Rhode Island rate of primary and secondary syphilis increased again to 3.4 cases/100,000 people. The incidence rate for females was <5 (per 100,000) compared to 43 for males. There were 46 cases of infectious syphilis (primary, secondary and early latent stages) statewide in 2007, an increase of 130% over the 20 reported cases in 2006 and an 820% increase in infectious syphilis from the five reported cases in 2000. (Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Mental Health

In recent years, there has been increasing recognition that self-reported measures of health status capture dimensions of quality of life and well-being. In 2007, according to the Behavioral Risk Factor Surveillance System (BRFSS) the number of days during the past month that Rhode Island women stated their mental health was “not good” was 39.5% compared to 37.8% women nationally. Overall, women in Rhode Island reported a higher number of days of poor mental health than men.

3G. OTHER NEEDS ASSESSMENT DATA: COMMUNITY IMPUT

Community participation in the needs assessment process is an important aspect to understanding the Maternal and Child Health needs in Rhode Island. In order to better understand the needs of the community, a combination of quantitative and qualitative examination is required. The three components of the community participation in the five-year needs assessment process were: a community input meeting, nine community forums and a public hearing. Information related to state needs, capacity and priorities was collected at these meetings that included various internal and external stakeholders, other state agencies, providers, and consumers, including parents of children with special health care needs.

Community Input Meeting

The Community Input Meeting was held in partnership with the RI Department of Health and RI KIDS COUNT with over 130 participants representing a diverse mix of over 40 community organizations. The meeting was kicked off with a welcome from the director of the RI Department of Health, the executive director of RI KIDS COUNT, and a presentation on "building equity" by the executive director of the Division of Community, Family Health & Equity (CFHE). Participants were invited to participate in breakout sessions based on the priority population groups identified: Early Childhood, Middle Childhood, and Adolescence, Children and Youth with Special Health Care Needs (CYSHCN), Pregnant Women and Women across the Lifespan. For each priority population breakout session, a population-specific data brief was provided to the participants and summarized at the beginning of the session (Please See Appendix B of the Needs Assessment Document for each of the data briefs). A review of the data showed that RI is, with some exceptions, above the national average for many MCH indicators. Disparities within the state by race and ethnicity, however, were evident in both access and outcomes in a number of areas (presented in detail throughout this assessment). The meetings began by highlighting some of these disparities and how they related to the equity and life course framework under which the CFHE is operating. Using the data to drive the discussion, the groups then identified main priorities, potential actions, and opportunities to address these priorities. Although it is not possible to list all of the important issues and topics raised during these meetings, a summary of some of the reoccurring themes follows. (For a more complete summary see "Community Input Summary Table" in Appendix D.)

The Early Childhood groups identified the importance of parental involvement/family engagement for families with young children as a key theme. The group discussed several other issues, including the importance of coordination and education for providers and families with particular concern around breastfeeding and maternal depression support for the mother. The groups emphasized the importance of sharing information through data systems such as KIDSNET and in particular examining the decrease in immunization rates. The importance of the social determinants of health such as access to nutrition, safe spaces, as well as specific education around pregnancy and parenting were brought up as priorities for the state. The Middle Childhood group focused on partnerships with

schools and school communities, citing the need to broaden the idea of what schools are, in order to make them full service community partners. Wrap-around and full service models of schools which serve to engage parents as well as the wider community were cited as models on which to grow. The group identified behavioral/mental health services as a significant gap, and stated that access to child psychiatry and other mental health services is difficult in RI. The group discussed the importance of the school as an opportunity to teach, model, and provide "health" as well as "academics" through increases in physical activity, obesity prevention initiatives, and school-based health centers.

The Adolescence breakout session also identified school-based healthcare as a theme and gap in RI. Better access to health care in general, and to mental health service delivery systems specifically, were listed as important themes for adolescents in need. School-based health clinics were cited as a successful intervention addressing both of these service gaps and can help both parents and teens by providing services at school. The group proposed forming partnerships between state agencies, community-based organizations, and youth in order to address a lack of services and collaboration. LGBT adolescents were identified as particularly vulnerable populations in the state in need, with significantly higher mental health and suicide risk. Finally, the group pointed to the need to understand adolescents in a positive way and give youth a voice in adolescent services. They suggested the importance of using social media in outreach and communication messages, as well as the importance of family involvement.

For CYSHCN, the groups emphasized the desire to maintain and build on current gains identified in the data briefs such as provision of community involvement, peer models, and coordinated care services. The groups emphasized the importance of peer-to-peer mentoring programs – using college/high school students to mentor younger students with similar chronic health conditions/diagnoses and similar peer-to-peer interventions for parents. Both groups stated that the health care, social services, and education systems were often hard to navigate for families and that rather than training people to navigate the system the focus should be on how to simplify the system and make it more "user-friendly." The groups emphasized the need to build quality pediatric medical homes and explore sustaining systems of care. Finally, the groups stated the necessity of addressing the needs of the "gap kids" who are not sick enough to qualify for assistance but require significant services – and the growing number of families who cannot access the care their children need.

The Pregnant Women breakout session identified one cross-cutting theme of particular importance, which was to reduce the social isolation of pregnant and post partum mothers. Suggested ways to accomplish this include: increased parental involvement/family engagement, peer-to-peer support, and use of other evidence-based programs that provide linkages for individuals who feel isolated. One of the other themes identified by these groups was the delay in Medicaid application and eligibility approval process. The push to provide early and comprehensive prenatal care to all women in their first trimester runs into a conflict with the long wait for eligibility approval for Medicaid for uninsured women. Another top concern/theme identified is the importance of providing comprehensive sexuality education - including healthy relationships, women's health, sex education, family planning, and preconception care. Finally, the importance of mental health screening for pregnant and postpartum women was a top issue for participants in this group, citing the history of depression as the strongest predictor for post partum depression, and the devastating impact post partum depression can have on a family.

The last breakout session, Women across the Lifespan, emphasized the importance of breaking down barriers to health care for women across the life course. Issues such as transportation and limited hours of care can sometimes keep women from seeking the services they need. Language barriers, lack of knowledge of available services, and health insurance coverage were also cited as significant barriers to care for women in the state. Secondly, the issue of knowledge of and access to birth control, family planning, STD prevention – and the importance of increased reimbursement and funding for these services in the state were seen as an important theme. Finally, addressing the social determinants of health such as poverty, stress, nutrition and safety were emphasized for serving Women across the Life Course.

Community Forums

Nine community forums took place throughout the state at a range of settings including a women's health council, women's health advisory council, and children's advocacy organizations, with a total of over 300 participants. The community forums identified many of the same themes that the community input meeting did, including issues around access to care, gaps in mental health care, and social determinants of health.

The issues related to children are sometimes specific to a particular developmental stage, and sometimes overlap across the age span. Around the issues related to Early Childhood, the community forums identified the need for child development and referral networks for participants in Early Intervention. The groups emphasized the need to target high risk areas, citing gaps in areas such as Central Falls – one of RI's core cities. They proposed that there would be a potential decrease in the number of at-risk infants through improvement in prenatal care, support services and early identification. For Middle Childhood population, the issue of a lack of mental health services was again stated as a pressing concern - including psychiatry, psychology, school-based and group services. The groups emphasized the importance of using KIDSNET share information and data. They stated the need to ensure screening, immunization, dental care and healthcare coverage for children of all ages. For Adolescence, community members suggested the importance of working with schools to: increase physical activity, comprehensive sex education, Vaccinate before You Graduate, and behavioral health services. The groups stated the importance of addressing special at risk populations of adolescents, including the homeless, LGBT, and pregnant or parenting teens who are at high risk for adverse outcomes. For children of all ages, the importance of addressing the childhood obesity epidemic was listed as an area of concern across all groups and every setting.

For CYSHCN, the community groups prioritized activities to increase social engagement for CYSHCN such as opportunities for recreation, sports, after-school activities, and peer-to-peer mentoring programs. The groups stated the need for increased support for and expansion of the Pediatric Practice Enhancement Project (PPEP). The community input groups cited the need to decrease barriers to services such as transportation, and to expedient access to durable medical equipment. They stressed the need to increase awareness of services available, especially in minority communities. The community stated the importance of risk reduction strategies with CYSHCN who are at higher risk for mental health issues, substance use disorders, and obesity. Finally, the community groups emphasized the need to try to improve access to prenatal care and early screening services to maximize the potential of each individual child.

For Pregnant Women, the groups emphasized the importance of increasing participation in pre-conception, pre-natal, parenting classes, tobacco cessation and breastfeeding education programs. The groups suggested offering incentives that might increase participation such as diapers, food, etc. They emphasized the need to reduce barriers to access to prenatal care and proposed that group visits such as the "centering model" may be one way to increase access. Reimbursement schemes must be simplified and presented clearly to consumers and providers. Finally, the importance of screening and linking women to services for post-partum depression was again cited as an important concern for pregnant women in RI.

The forums that contributed to Women across the Life Course, emphasized the importance of working with health insurers and the provider community to increase access to prevention and wellness-promotion activities. Heart disease is the leading cause of death among women, and the community participants noted the importance of providing prevention and support services such as: focus on obesity, worksite wellness initiatives, outpatient diabetes education, and funding prevention. They stressed the importance of increasing awareness among providers and health plan participants of these health promotion benefits and services. Finally, another common health condition that impacts daily living for adult women is pelvic floor disorders. The community participants emphasized a need to focus on screening and support services for these disorders.

Common Themes

In reviewing the material from all of the community input activities there were a few overarching or common themes throughout the multiple sessions. The consistent themes throughout all sessions were: the importance of family engagement, access to care, collaboration/coordination, and social determinants of health. The two issues that were most prominent throughout the sessions were mental health and obesity. The themes and priorities, along with the quantitative data presented, led to the development of the current state priorities.

The theme of family engagement, and parental involvement, was listed in almost every session in one way or another. The family is the backbone of our society and when this fundamental institution is not fully supported, and engaged, the consequences are clear. As a result, the first RI state MCH priority is to, "Expand capacity and access to parent education and family support programs." The second cross-cutting theme identified was "Access to Care". Access can be hindered through a wide range of factors such as cultural or language barriers, literacy, education, transportation, or financial. Access can be helped by a wide range of options such as increased access to health care coverage, increased awareness of benefits and services, increased funding for services, patient-centered medical homes, and culturally appropriate services. In response, the RI MCH priorities include, "Increase the percentage of adolescents who have a preventive "well care visit each year", "Increase the percentage of women who have a preventive care visit in the past year", and "Initiate prenatal home visiting program".

The health topics that were consistently identified as recurring themes or pressing concerns throughout the groups were: obesity and mental health. Across all priority populations, obesity was raised as a concern and an important issue that the community wants to focus on in the future. Mental health was consistently listed as one of the biggest priorities across all populations as well, and gaps in services were consistently stressed as significant factors that lead to additional public health challenges – particularly for CSHCN. In response, the RI MCH priorities

include, “Increase the social and emotional health of children and youth with special health care needs.” Finally, the importance of the social determinants of health and the profound impact that socio-economic factors have on individuals’ health was consistent throughout all sessions. The MCH priority to “Adopt social determinants of health into public health practice” reflects this concern and a commitment to keeping this in the forefront of Title V programs going forward.

4. MCH Program Capacity by Pyramid Levels

a. Direct Health Care Services

The Maternal and Child Health Services Block Grant, Title V of the Social Security Act, is the only federal program devoted to improving the health of all women, children and families. Although the Department of Health and the Title V program have not been major providers of clinical care services for several decades in Rhode Island, we have been heavily engaged in the long term development and monitoring of the health care system's organization and performance. We have made strategic investments and policy commitments to an integrated community primary care capacity for all through support for programs such as widespread community health centers, statewide home visiting and school based preventive investments.

These community networks provide primary care, family support, early intervention and school services we believe are the foundation for Rhode Island's good results in maternal and child health. The Kaiser Family Foundation developed a dimension score, a standardized summary measure that captures the average of the indicator disparity scores along with an adjustment for the relative prevalence of the indicators for women in the state to try to measure the relative levels of access and utilization of healthcare by women. Twenty states and the District of Columbia fared better than the national average for the access and utilization dimension, including RI, ranked second behind Delaware. (Source: http://www.kff.org/minorityhealth/upload/7886.pdf PG. 46)

Physician Supply and Distribution

Although Rhode Island appears to have an adequate supply of licensed physicians, issues remain regarding the number working in patient care activities, working in primary care, specific sub-specialties, and their geographic distribution.

Current data for 2010 licensure of medical professionals in RI indicates 4828 physicians working in RI. Of these, 4027 deliver direct patient care and 756 do not (45 unknown). According to the RI Department of Health Licensure records for 2010, there are approximately 383 physicians working in patient care per 100,000 population. There are, however, ten areas (encompassing 14 cities/towns) in Rhode Island that have been designated as Primary Care Health Professional Shortage Areas in Rhode Island (see Table 8).

Table 8:
Health Professional Shortage Areas in Rhode Island: Primary Care

City/Town and Service Area	HPSA Type
Burrillville, Foster, Glocester (Northwest Providence County)	Geographic
Central Falls and Pawtucket (Al Census Tracts)	Low-Income Population
Charlestown (Narragansett Indian Tribe)	Native American Population
Cranston (Adult Corrections Institute)	Correctional Facility
East Providence (All Census Tracts)	Low-Income Population
Hopkinton (Hope Valley) (Wood River Health Services, Inc.)	Non-Profit Medical Facility
Newport and Middletown (Census Tracts: 402, 403.02, 405-408, 410, 412)	Low-Income Population
Providence (All Census Tracts)	Low-Income Population
South Kingstown (Wakefield) Health Center of South County	Non-Profit Medical Facility
Woonsocket (Census Tracts: 172, 174, 176, 178-182)	Geographic

Community Health Centers (CHCs)

Since their inception, in 1965, Community Health Centers (CHCs) have delivered community-based primary care to medically underserved populations, including the uninsured. A major portion of the funding for CHC operations comes from two federal grant programs and the Medicaid and Medicare programs. The remaining portion derives from state and local governments, patient fees that are set on a sliding-scale basis according to income and family size, private insurance, and other contributions. Overall, grants tend to offset the difference between the actual costs of providing care and the amount collected from third-party payments and fees. These grants usually pay for the care of the uninsured and medically underserved, as well as essential support services (e.g., transportation, translation, outreach, case management) not covered by traditional insurers. These support services are intended to improve the health outcomes of this socially and economically stressed population.

In 2010, Rhode Island currently has 7 Federally Qualified Health Centers (FQHC's) over 48 sites across the state. Medical services provided by the centers include prenatal and obstetrical care, family planning, gynecology, pediatrics, family medicine, adult internal medicine, optometry, podiatry, nutritional counseling, and dental care.

Neighborhood Health Plan of Rhode Island (NHP-RI), an HMO created by the CHCs, contracts with RIte Care to help keep a critical mass of Medicaid recipients in the CHC system. (NHP-RI is one of 27 HMO-like plans in the country that are owned in whole or in part by Health Centers.)

Physician Assistants (PAs)/Nurse Practitioners (NPs)

Mid-level providers such as PA, NP, and CNM play an important role in the healthcare delivery system of RI. As of June 2010, there are 324 Physician Assistants (PAs) practicing in Rhode Island. There are no PA training programs in Rhode Island. The two schools from which Rhode Island PAs have graduated most frequently are Northeastern University in Boston and Yale University in New Haven.

At this time in 2010, there are 700 Nurse Practitioners (NPs) and 73 Certified Nurse Midwives (CNM) in Rhode Island. There is one School of Nursing in RI, the University of RI that offers a Master 's degree and certification as a Nurse Practitioner.

Nursing Supply

Currently, in 2010, there are 18,791 nurses actively licensed to practice in RI. Specifically, there are 16,737 registered nurses and 2,054 practical nurses licensed in Rhode Island. Almost half of RI RN's do not work in direct patient care.

Physical Therapists

Allied health professionals are formally trained, licensed health care providers who practice in a variety of settings. They include psychologists, social workers, podiatrists, physical therapists, occupational therapists, speech therapists, and others. As of June 2010, there were 1,125 physical therapists practicing in Rhode Island.

Currently there is only one accredited educational program for the physical therapy profession in the state of Rhode Island. The University of Rhode Island offers a Professional Master's Degree Program. Although the number of graduates from all physical therapy programs is expected to continue to grow over the next several years, most programs only admit a very small percentage of applicants into the program. A lack of properly trained physical therapy faculty has forced most programs to put a cap on the number of students in each class.

Occupational Therapists

Occupational therapists provide rehabilitation services to individuals with physical, psychological, or developmental impairments. There are currently 608 occupational therapists employed in Rhode Island. The number of licensed occupational therapists in Rhode Island has increased significantly, more than doubling over the past decade.

Currently, most licensed occupational therapists in Rhode Island are employed by hospitals. The other settings in which occupational therapists practice include community mental health centers, schools for handicapped children, adult day care programs, outpatient clinics, rehabilitation facilities, nursing homes, sheltered workshops, and research facilities. However, no data exist currently regarding the number of occupational therapists in Rhode

Island that practice in these settings. There are no occupational therapy programs in Rhode Island. Like physical therapy, occupational therapy is considered one of the fastest growing allied health professions.

The increased demand for occupational therapy services is attributed to advances in medicine that allow physicians to save lives that may have previously been lost, such as very low birth weight infants, children with birth defects, and victims of accidents and disease.

Speech Therapists

The number of speech-language pathologists and audiologists employed in Rhode Island has grown moderately. As of June 2010, there are 590 speech therapists practicing in RI. Schools employ almost 60% of all practicing speech pathologists in Rhode Island. The University of Rhode Island is the sole training institution in the state offering an accredited master's degree program as well as an undergraduate training program for speech-language pathology. Although the URI master's degree program enrolls no more than 50 students at any time regardless of demand for entry, the number of students completing the undergraduate program at URI has more than doubled in less than a decade. There has been a steady increase in the number of graduates from the URI speech pathology undergraduate and master's programs.

Hospitals

In Rhode Island there are 11 hospitals licensed by the State of Rhode Island. Together these facilities comprise 3,928 beds, of which 700 were in a government- operated institution primarily providing care for chronic disease patients, 165 were in psychiatric hospitals and 82 were in a dedicated rehabilitation facility. Of the 14 hospitals, 11 are community general hospitals and they report patient level data to the Department of Health. Nine of the community general hospitals provide obstetric/gynecologic and/or pediatric services. Seven provide maternity services. In RI, both insured and uninsured use the Emergency Department at a rate of 470 per 1,000 which is higher than the U.S. rate of 404 per 1,000 population suggesting under-utilization of primary care office visits.

HEALTH role in Direct Services

The priorities for Rhode Island regarding availability of health care and health-related services include: increasing access to care, increasing patient-centered medical homes, and reducing health disparities related to health care. Specifically, the State Priorities related to Direct Services are to Increase the percentage of adolescents who have a preventive "well care" visit each year and to increase the percentage of women (18+) who have a preventive care visit in the past year. In order to increase these rates the State will have to address barriers to care around family support and involvement, access to care, transportation, health and wellness and preventive care/screening. The State is also committed to promote and increase the use of evidence-based programs to support parents and families, including an expansion of current home-visiting services to include prenatal home visiting.

Because of our unique position as the smallest state in the nation, we are fortunate to have the Warren Alpert Medical School at Brown University and its affiliate teaching hospitals and practices. There is only one pediatric

hospital in the state and one tertiary birthing hospital, which facilitates and simplifies referral and coordination of care to specialized secondary and highly specialized tertiary care. The network of Community Health Centers provides the bulk of our safety net services, coordinated by the Rhode Island Health Center Association. In 2009, Rhode Island Community health centers served approximately 120,000 residents in Rhode Island. In addition, community health centers provided over 500,000 patient visits.

Although several of our programs continue to provide services to vulnerable populations such as WIC, Women's Health Screening and Referral Program, and Family Planning, through contracts with community partners, the focus has shifted over time. The Division of Community, Family Health and Equity (CFHE) now focuses much of its resources and efforts on strengthening community-based infrastructures, building sustainable systems of care, and assuring effective ongoing quality improvement activities.

WIC

The Special Supplemental Nutrition Program for Women, Infants, and Children - better known as the WIC Program - serves to safeguard the health of eligible women, infants, & children up to age 5 who are at nutritional risk. This program provides nutritious foods to supplement diets, information on healthy eating, breast-feeding advice and support, and referrals to health care. During the summer in RI, WIC provides checks to families to buy fresh fruits and vegetables at local Farmers' Markets. WIC also provides "Veggin' Out" cooking demonstrations, where families can learn new recipes that use fresh fruits and vegetables, take place throughout the summer at Farmers' Markets across Rhode Island.

Home Visiting

The Home Visiting outreach program provides developmental screening, home assessments, connection to community services, and help with child development for about one third of all families with new babies each year. The program provides nurses, social workers and trained parent visitors to help expectant mothers and serve as the follow-up staff for newborn screening, early intervention, lead poisoning and immunization programs.

Family Planning

The Title X Family Planning Program provides high-quality care, services, education and counseling to women, men and teens, primarily through the network of Title X funded Community Health Centers throughout the state. The mission is to provide information and services that will enable people to maintain their overall health, regardless of ability to pay, to avoid unintended pregnancy or achieve a planned pregnancy when they are physically, emotionally and financially prepared to take on the responsibility.

b. Enabling Services

Enabling services are seen as part of a seamless comprehensive health care system that includes primary and specialty physicians, nursing, nutrition, social work, dental care, and all the special skills required for children with significant disabilities. Most managed care contracts, especially RIte Care, reflect this broad inclusion of

enabling services, although there are specific system capacity/access issues (especially for dental care and children's behavioral health) our overall health system capacity and availability appears good.

The Division of Community, Family Health and Equity works to provide families with information and resources that will help them receive the services they need. Provider education and training, culturally competent program materials, home visiting, and community support have been areas that DCFHE has focused on to achieve this goal.

HEALTH role in Enabling Services

One of the identified State Priorities is to: Expand capacity and access to parent education and family support programs. Rhode Island offers developmental risk screening for all newborns discharged from a birthing hospital in the state; increasing the number of risk positive families that receive a home visit within the newborn period is a top priority for the State. Another of the State's priorities is to increase the social and emotional health of children and youth with special health care needs. In order to meet this goal, the State will be working to address issues around improving access to care and a medical home as well as addressing issues of mental health and family support and involvement. A great deal of emphasis in the state is on developing linkages in order to promote optimal provision of care and coordination between different services. Partnerships with schools and communities are key to this effort.

A description of the impact of "emerging issues" can be found in Appendix F.

Successful Start

Successful Start partners uses Rhode Island's Early Childhood Systems Plan to ensure that all young children reach their full potential through a system of services that promotes healthy social-emotional development, quality early care and education, coordinated medical homes, and effective parent education and family support services to create a comprehensive and coordinated early childhood system that supports families and communities in promoting positive early childhood development with the goal that all children enter school healthy and are ready to learn. The Successful Start Partnership is comprised of over 200 early childhood leaders, including all of the state departments that administer programs for young children, community-based agencies, child care providers, health care and mental health professionals, child advocates, and parents.

Parent Consultants

Rhode Island has pioneered the use of Parent Consultants in developing programs, policies, and quality improvement for RI families and especially children and youth with special health care needs. There are more than 150 current and former Parent Consultants, who were recruited from MCH and CYSHCN programs, trained and supported to improve outreach, quality, and performance of our programs and the entire system of care in RI. Some current Parent Consultants initiatives include medical home enhancements, healthy housing, nutrition, and youth engagement.

Watch Me Grow

As part of Successful Start, the RI Early Childhood Systems Plan, evidence-based early childhood developmental screening is being used in pediatric practices, and in nearly 30 child care centers. This initiative will also serve as the initial component of RI's plan to screen young children for developmental and autism spectrum disorders.

Youth In Transition

Rhode Island has produced and makes available to youth, parents, physicians, educators and other professionals a cadre of resources to support Youth in Transition. Although designed for youth with special healthcare needs, many of the youth and parent resources directed at self-determination, goal setting and adolescent development are widely used by all youth in RI.

CEDARR

Comprehensive Evaluation, Diagnosis, Assessment, Referral, and Re-Evaluation (CEDARR) is the RI care coordination system in order to help coordinate and monitor specialty care for Children and Youth with Special Healthcare Needs (CYSHCN) and their families through contract management; preparation of specialty resource guides and interdepartmental administration.

KIDS CONNECT

This is a program that provides specialized services at licensed childcare centers that can help children with special needs participate, play and learn, along with their typically-developing peers. Licensed childcare centers and after-school care programs contract with the State to provide this service. A child must meet the following requirements to be eligible for Kids Connect. He or she must be eligible for Medical Assistance, 6 weeks to 16 years old, and have a chronic condition - cognitive, physical, developmental and/or psychiatric- that is moderate to severe.

Family Voices

Provides family support via contracts at the RI Parent Information Network (RIPIN) to recruit, train and support family members for outreach, family support, family-to-family networking and policy development at state and local levels.

PPEP

Pediatric Practice Enhancement Project (PPEP) sponsors the medical home initiative to provide parent consultants to participant primary care practices to enhance the provision of a coordinated medical home.

Parent Partners in the Clinic

This program employs and strategically places parent partners throughout the service delivery system to ensure access to family-centered services and promote ongoing improvement in the health care system.

c. Population-Based Services

Although we do not provide clinical care, the Rhode Island Department of Health does maintain key population prevention and surveillance services. We provide the full package of vaccines free of charge to all children. We finance lead screening for all children. Within our Communications and Policy Unit, we continue to maintain our Family Health Information Line, which receives nearly 2,500 calls per year. Information Line staff respond to questions and information requests and also are able to survey Rhode Islanders on key issues. The Communication and Policy Unit has also worked with Family Health program staff to develop media campaigns on topics including immunizations, lead poisoning, and adolescents.

The Department is deeply committed to maintaining the information base and timely interactive surveillance capacity, as part of a larger core public health agenda to assure knowledge for health decisions and quality of health services. In these matters, we work closely with a variety of cabinet level policy forums. We are deeply committed to Rhode Island KIDS COUNT, which has become the shared information environment for children's policy development statewide, and the dissemination arm for Title V needs assessment data. Rhode Island KIDS COUNT is an autonomous 501c3 organization, with broad roots in universities, business, and medical leadership, as well as state cabinet linkages.

HEALTH Role in Population-Based Services

As previously mentioned, because of the small size of the state, geographic distribution of services is not as difficult as it is in some states. Nevertheless, there are clearly some cities and towns with significantly more resources and services than others. Transportation to services is an often cited barrier to care, and a priority for the state to address. The main tertiary hospitals are in the capitol city and accessible by public transportation, Some services, however, such as home visiting, early-childhood, and behavioral health services are not equally distributed across the state. While many of these services are located where the State's population has the highest density and often the greatest need, ensuring access to all residents is a priority.

The DCFHE has established leveraging existing networks and community initiatives as a top priority. The DCFHE works hard to facilitate coordination efforts and convenes a large number of coalitions, committees and task forces in addition to the direct contracts and memorandum of agreements established with various agencies and organizations across the state. Population based services are provided in coordination with community-based service providers throughout the state through a combination of direct contracts, agreements, support, and referral.

Childhood Immunization Program

In RI the Childhood Immunization Program provides free vaccines to healthcare providers for children from birth through 18 years of age. Rhode Island's universal vaccine policy, strong partnerships, and sophisticated immunization registry has contributed to our high immunization coverage rates among children. Providers who use state supplied vaccines are also enrolled in KIDSNET, Rhode Island's registry for immunization and other

childhood preventive health services. KIDSNET stores immunization information, alerts providers to immunizations that are due, missing, or invalid for individual children, and is used for quality assurance reports and assessment of vaccination coverage rates by physicians.

Universal Newborn Screening Program

This program involves universal screening and follow-up for a growing list of metabolic, endocrine and blood disorders and other serious diseases of infancy. It also provides hearing screening and developmental risk assessment. Results are recorded in the state's KIDSNET System, which offers data query and individual tracking systems to the state's primary and specialty care practices.

Women's Health Screening

This program provides women's health screening in primary care settings. The program's goal is to prevent unintended pregnancies and improve pregnancy and birth by identifying health risks and ensuring appropriate referrals, both prenatally and during the pre-conception period.

Family Health Information Hotline

The Hotline supports a statewide toll-free telephone resource for all families in Rhode Island. Bilingual information specialists answer families' questions on a wide variety of topics and refer them to appropriate community resources. The program also distributes culturally and linguistically appropriate consumer materials.

Lead Screening

The Rhode Island Childhood Lead Poisoning Prevention Program (RI CLPPP) in RI ensures that all physicians registered or licensed by Rhode Island screen children under six years of age for lead poisoning. Anyone making the diagnosis of childhood lead poisoning in RI must report the diagnosis to the Director [of Health] within 10 business days of the diagnosis. Primary Care Providers in Rhode Island can also participate in KIDSNET, the state's integrated child health information system, which contains pediatric public health data, including lead screening.

Family Voices at the RI Parent Information Network (RIPIN)

Family-To-Family Health Information and Education Center, provides information, education, advocacy, and peer support to families and professionals concerning raising children and youth with special health care needs. Further, RI employs over 35 parent consultants in clinical settings to ensure family-centered practice and to maintain continuous quality improvement.

Medical Home Enhancement Model

RI implemented a medical home enhancement model that employs trained parent partners in 8 primary care practices and 25 specialty care practices, including the state's largest neonatal intensive care unit and pediatric

intensive care unit to link families with community resources through care coordination. The Family Voices Leadership Team addresses systems barriers to coordinated care delivery.

RI Children's Cabinet

This group committed to maintaining high insurance rates for all children and especially CYSHCN. Through the Medicaid Consumer Advisory Committee, Health Insurance Advisory Council, and Neighborhood Health Plan of RI's CYSHCN Advisory Committee, CYSHCN and their families have direct input in ensuring adequate insurance.

d. Infrastructure-Building

The majority of the Division of Community, Family Health and Equity's investments are in infrastructure building. To assure a statewide system of family-centered, community-based, culturally competent and coordinated services to preserve, protect, and promote the health and development of children and their families, the Department has committed to a parent development and local systems development strategy. Our emphasis is on public engagement, parent education, and the broad integration of our WIC, Family Planning, Successful Start, CATCH initiatives, and other investments into community systems building forums. By combining these efforts with community-linked health services and a variety of other growing commitments to adolescent and young adult prevention, we have a strategy at the neighborhood level to assure success and safety, so that all youth shall leave school prepared to lead productive lives.

The Title V Maternal and Child Health Block Grant is using a life course developmental approach in addressing the social determinants of health as a framework for health planning. Title V also assures that the needs of families and children in RI are met by focusing on the following areas in response to the comprehensive needs assessment: 1) Improve Maternal Health; 2) Promote healthy lifestyles and healthy weight; 3) Engage and empower parents; 4) Support safe and healthy environments for families, 5) Address social, emotional, and behavioral health needs; 6) Improve pregnancy outcomes; 7) Assure all Rhode Island families have a medical home; 8) Promote healthy development in children, adolescents, and families; 9) Build a connected community system of services for children and youth with special needs and their families.

Finally, we are deeply engaged with many colleagues in both state and community forums to assure that all families shall be safe in their homes, neighborhoods, and schools. In these forums, we bring together the Title V, Part C of IDEA, SSDI, WIC, and school health mandates. Most of these forums include representation from the Department of Human Services (Medicaid, Child Care, Welfare Reform) and the Department of Children, Youth and Families (Child Welfare, Children's Mental Health) and the Department of Education. They also include the academies and colleges of medical specialization, and often a representation of major community provider agencies. In general, we are attempting to avoid categorical and discipline-specific system development and policy forums, in favor of more broadly integrating all the stakeholders and contributors. This is reflected in our community family service development forums, and our state level policy forums.

KIDSNET

KIDSNET is Rhode Island's confidential, computerized child health information system. KIDSNET serves families, pediatric providers, and public health programs like the Immunization Program and WIC (Special Supplemental Nutrition Program for Women, Infants and Children). The purpose of KIDSNET is to help make sure that all children in Rhode Island are as healthy as possible by getting the right health screening and preventive care at the right time. KIDSNET started collecting information from all births in Rhode Island on January 1, 1997. KIDSNET also obtains information about children born out of state if they see a Rhode Island participating doctor or receive services at a KIDSNET participating program. As of January 2005, KIDSNET also began collecting immunizations given to children born before 1997, up through age 18. KIDSNET contains only recent immunizations given for this age group.

Successful Start

This program is a statewide, collaborative effort to strengthen Rhode Island's system of services for young children and families. The project is focused on four critical domains of early childhood health and development: Early Care & Education, Medical Homes/Health Care, Parent Education/Family Support and Social-Emotional Development. Successful Start partners include state departments, community-based agencies, child care providers, health care and mental health professionals, advocates, and parents of young children. The partners are committed to the initiative and are dedicating their time and resources to moving the plan forward. Our work to build a better early childhood system is directed at realizing our vision that all children enter school healthy and ready to learn.

Adolescent Transition Group

This group is a statewide, collaborative effort to strengthen Rhode Island's system of services for younger children. The group follows a life course approach for younger children to ensure supports are in place as they transition to adolescence. The group will develop a strategic plan to build comprehensive system of care for adolescent health.

Medical Home

Recognizing the fact that people need multiple sources of care and support, medical home builds community-based programs designed for comprehensive care for people across the life course.

Mental Health

Children's Behavioral Health

Publicly-funded mental health services for children (birth through age 21) are provided by the Rhode Island Department of Children, Youth and Families (DCYF) through contracts with private organizations and clinicians, and by the Department of Human Services through contracts with the health plans that participate in the RIte Care program.

DCYF arranges and monitors a continuum of therapeutic and clinical services for seriously emotionally/behaviorally disturbed children and youth. It also provides an array of community-based therapeutic/supportive services aimed at maintaining healthy family functioning. Children who are placed in the custody of the Department due to abuse, neglect, and dependency, as well as children, who remain in the custody of their parents or legal guardians, are eligible for these services. Most services are delivered in community-based settings and are accessed primarily through the eight Community Mental Health Centers (CMHCs).

Components of the publicly supported mental health system for children include: certified mental health clinicians, day treatment programs, residential counseling centers, residential treatment, children's intensive services, psychiatric hospitalization, purchase of service, and diagnostic assessment services.

Medicaid is a major payer for mental health services in Rhode Island and an important source of support for the CMHCs. As described above, Medicaid funding is directed to the public mental health provider network primarily via MHRH on behalf of adults with serious and persistent mental illness and by DCYF on behalf of children with severe emotional or behavioral disorders.

Mental health services are also provided through RIte Care as part of the managed care benefit plan. Each health plan provides and manages mental health services to its enrollees through its own in-house provider network. The State and the health plans share the risk of covered high cost mental health services via stop-loss provisions in the RIte Care contract. Annually, more than 6,000 RIte Care enrollees receive mental health services through their plan.

Community Mental Health Centers (CMHCs)

In Rhode Island, CMHCs are the backbone of the publicly funded mental health system. The CHMCs are private non-profit agencies that provide mental health services with a particular emphasis on community-based alternatives to institutionalization. Each CMHC is governed by a board of directors. There are seven CMHCs in Rhode Island plus three additional entities (Riverwood Mental Health, North American Family Institute, and Fellowship Health Resources) that contract with the State to serve persons with SPMI. Each CMHC is responsible for providing non-inpatient mental health services in its catchment area to priority populations as defined by MHRH and DCYF. Additionally, the CMHCs have protocols in place to ensure cooperation and linkages with other public providers of mental health services statewide. CMHCs act as "gatekeeper" for all adult inpatient services.

Psychiatrists and Other Behavioral Health Care Providers

In June 2010, Rhode Island has approximately 709 Psychiatrists, but only 34 child psychiatrists, and these are unable to meet the community needs. Compared to physical health services, behavioral health services have been underfunded. Behavioral health providers are reimbursed at lower rates than physical health providers, insurance plans place more restrictions on behavioral health benefits than physical health benefits. In 2008, there were 1,696 hospitalizations of children with a primary diagnosis of mental disorder.

In addition, addressing behavioral health needs may involve multiple disciplines, however, such as psychology, counseling, social work and nursing. According to a study of behavioral health care in the state by the Rhode Island Statewide Health Assessment Planning and Evaluation (SHAPE) Foundation, "Difficult Seas:

Navigating Behavioral Healthcare in Rhode Island", there are several key barriers to access behavioral care. These barriers include: lack of insurance, social stigma, fragmentation, communication barriers, lack of intermediate services and underfunding.

Health Professional Shortage Areas for Mental Health

Table 9 shows the six health professional shortage areas for mental health in Rhode Island.

Table 9: Health Professional Shortage Areas in Rhode Island: Mental Health

City/Town and Service Area	HPSA Type
Charlestown (Narragansett Indian Tribe)	Native American Population
Cranston (Adult Corrections Institute)	Correctional Facility
Cranston (Eleanor Slater Hospital)	Facility
Newport County (Portsmouth, Middletown, Newport, Jamestown, Little Compton, and Tiverton)	Geographic (Single County)
Northern Rhode Island (Cumberland, Lincoln, North Smithfield, Burrillville, and Woonsocket)	Geographic
Providence, Pawtucket and Central Falls (All Census Tracts)	Low-Income Population

Oral Health

Among all children in RI, 86.5% received preventive dental visit in the past year, and 79% of RI kids are reported as having "excellent or very good" oral health, according to the 2007 National Survey of Children's Health. Many children, however, do not get the dental care they need. According to a 2007-2008 RI Department of Health statewide oral health survey, 48% of 3rd grade children have cavities and 1 out of 4 have untreated tooth decay. They found that 4% of the children screened were in urgent need of dental care due to pain or infection – if extrapolated to the population of RI this indicates that up to 2,900 children may need urgent dental care because of pain or infection. Access to oral health services for low income children, in particular, is a problem in Rhode Island. In urban schools, it was found that 4 out of 10 children have untreated tooth decay compared to 2 out of 10 in non-urban schools. RI has not met the HP 2010 objectives for reducing the prevalence of decay experience, untreated tooth decay or increasing the prevalence of dental sealants among elementary school children.

Dental care for Medicaid recipients is particularly concerning. Many dentists feel that Medicaid reimbursement rates for dental services are inadequate. As a result, many dentists are unwilling to accept Medicaid patients, at least to any significant degree. In addition to low reimbursement rates, the reasons cited by Rhode Island dentists for not participating in the Medicaid program include an excessive number of patients who fail to keep appointments; excessive paperwork; payment delays; poor communication with the state agencies; and patients with complicated medical and social histories. Problems with transportation, communication, and child care often prevent Medicaid recipients from keeping their scheduled appointments. Long distances between the home and the dental offices accepting Medicaid clients combined with a reliance on public transportation, language barriers and competing priorities can sometimes create difficulties for some individuals in making their scheduled appointments. These barriers may contribute to a high number of missed appointments.

As of June 2010 there were 687 actively licensed practicing dentists in Rhode Island. Among these 687 dentists, 530 (77.1%) were general dentists and 157 (22.9%) were dental specialists (e.g., orthodontists, oral surgeons, periodontists, etc.). According to a 2004 Rhode Island KIDS COUNT Issue Brief, over half (53%) of the practicing dentists in Rhode Island in 2004 were aged 50 or older. Since the average age of retirement for US dentists is 62.5, it is anticipated that approximately 300 dentists in Rhode Island will be at or close to retirement in the next few years. There also has been little growth in the number of dentists in Rhode Island in the past several years. Rhode Island does not have a dental school. A small pediatric residency program, however, was established in 2003 at St. Joseph Hospital in collaboration with Lutheran Medical Center in Brooklyn, New York which graduates two pediatric dentists each year. A general practice residency program at Rhode Island Hospital graduates two dentists annually since 2006. (Source: Rhode Island KIDS COUNT Issue Brief on “Access to Dental Care for Children in Rhode Island”. October 2004)

In Rhode Island dental practices can be found in almost every city and town. However, the availability of dental services varies considerably between localities. In some areas of Rhode Island there are shortages of dentists. There are eight “Dental Health Professional Shortage Areas” (DHPSAs) in Rhode Island (Table 10).

Table 10: Rhode Island Dental Health Professional Shortage Areas (HPSAs)

City/Town and Service Area	DHSPA Type/Population
Central Falls/Pawtucket (All Census Tracts)	Low-Income Population
Charlestown (Narragansett Indian Tribe)	Native American Population
Cranston (Adult Corrections Institute)	Correctional Facility
Hopkinton/ Hope Valley (Wood River Health Services, Inc.)	Non-Profit Dental Facility
Newport/Middletown (Census Tracts: 402, 403.02, 403.03, 405-408, 410, 412)	Low-Income population
Providence (all census tracts)	Low-Income Population
South Kingstown (Wakefield)	Non-Profit Dental Facility
Woonsocket/Northwest Providence County (Burrillville, Foster, Glocester, North Smithfield) (Census Tracts 129-130.02, 133, 131.01, 131.02, 128.01-128.03, 173-185)	Low-Income Population

**For additional information on the MCH Pyramid and the Equity Pyramid please see Section 4 (Part B) of the Rhode Island MCH application.*

Children and Youth with Special Health Care Needs (CYSHCN)
Four Constructs of a Service Systems; MCH Program Capacity

The Office of Special Health Care Needs (OSHCN) located in the Health Disparities and Access to Care Team of the DCFHE ensures that systems of care are built for families raising CYSHCN so they receive affordable health and related services that meet their needs. As RI's designated Title V Maternal and Child Health Office of Children with Special Health Care Needs, the OSHCN is mandated to "provide and promote family-centered, community-based, coordinated care for children with special health care needs, and facilitate the development of community-based systems of services for such children and their families."

RI is a 1914 A state (i.e. all children participating in the Supplemental Security Income program receive Medicaid benefits which includes rehabilitative services). The DCFHE convenes the SSI State Team, participates in

the Rhodes to Independence Medicaid Infrastructure Steering Committee, the Global Waiver State Implementation Team and the Family Voices Leadership Team to ensure a safety net for children eligible for SSI and their families. The Team includes representatives from the state departments of Health, Education, Human Services, Children, Youth and Families and other organizations such as the RI Parent Information Network, RI Family Voices, and Hasbro Children's Hospital.

The DCFHE and its OSHCN promotes family-centered, community-based, coordinated care (including care coordination) for CYSHCN and facilitates the development of community-based systems of services for CYSHCN and their families. Much of the Division's work in these areas focuses on infrastructure building activities. The DCFHE is in a unique position to advocate with families raising CYSHCN to coordinate statewide services and to provide leadership for the special needs service delivery system, especially as it relates to access to and quality of pediatric specialty services, educating children with special needs, child welfare prevention, and mental/behavioral health. DCFHE invests in the special needs infrastructure through parent support and empowerment opportunities and the provision of quality assurance through a special needs leadership council. These investments ensure that the service system is community based, family-centered, and accessible to all families. Also, family and consumer driven quality assurance promotes ongoing improvement in the health care system, which benefits all RI families. Please refer to the attachment for detailed information on DCFHE programs serving CYSHCN and their families.

Collaboration with Other State Agencies & Private Organizations

The DCFHE works closely with other state agencies, community providers of health services, and constituent groups to promote the healthy development of women, infants, and children, including CYSHCN.

RI Department of Human Services (DHS): HEALTH has a formal Medicaid agreement with DHS for Early Periodic Screening, Diagnosis and Treatment (EPSDT) services. It also has a memorandum of agreement with DHS to share data related to KIDSNET. HEALTH has an agreement with DHS to provide funds to support the Early Intervention Child Find mandate. Staff from the HEALTH provide consultation and professional expertise to DHS in the areas of assessment, assurance, and policy development through formalized workgroups and program specific discussions. HEALTH also has an agreement with DHS to involve their vendor EDS as pharmacy benefits manager of the AIDS Drug Assistance Program insuring that any infants, youth, or women not covered by Medicaid payor of last resort can access the medication.

The DCFHE also works collaboratively with DHS in the administration of the state's care coordination system for CYSHCN (CEDARR), the provision of services through the Early Intervention program, statewide access to screening and assessment for children with complex special health care needs, and the administration of parent engagement and support activities in clinical practices (through the Pediatric Practice Enhancement Project). The DHS and the OSHCN collaborate on family engagement programs, parent leadership and stakeholder initiatives. The DCFHE and DHS also jointly manage and fund the Child Care Support Network. DHS is a full partner in the implementation of Successful Start, RI's Early Childhood Comprehensive Systems initiative.

DCFHE staff works closely with DHS on the Family Voices Leadership Team (which is dedicated to removing system barriers to CYSHCN and their families). DCFHE staff also participates with the DHS Office of Child Support Services on the RI Fatherhood Coalition. DCFHE staff also coordinates with the DHS Kids Connect program which provides additional staffing so that children with special health care needs can participate in child care with typically developing peers.

DCFHE staff participated in the development of the Global Consumer Choice Compact 1115 Waiver Demonstration that was submitted to CMS in August 2008 and approved January 2009. DCFHE staff continues to participate on Waiver Implementation Workgroups as it relates to ensuring a medical home and access to screening and treatment to Medicaid recipients.

RI Department of Education: The DCFHE has a cooperative agreement with the RI School for the Deaf for the purposes of enhancing early hearing detection and intervention (EHDI) and systemically assessing, developing, and implementing strategies for tracking children beyond age five by including school hearing screening information and results in KIDSNET. The DCFHE is also working with RIDE in an effort to share school health data with HEALTH in a manner allowed under federal education privacy laws. RIDE is also a key partner in the implementation of RI's Early Childhood Comprehensive Systems Plan.

The OSHCN collaborates with RIDE on implementing and assuring access to special education through supporting the RI Parent Information Network Resource Center, assisting families through the PPEP and providing countless workshops and technical assistance to families and school districts. RIDE partners in the implementation of the PPEP program and assists families in understanding their rights in the special education system. RIDE and OSHCN partner on autism initiatives including the screening, diagnosis and education of children and youth with autism spectrum disorders. The OSHCN is an active member of the RIDE-led Transition Council and partners on several initiatives addressing youth with special needs in transition from pediatric to adult health care. OSHCN leadership was appointed to the Special Education Advisory Council in 2009.

RIDE works with both the Division's Tobacco Control Program and its Initiative for Healthy Weight to address PANT in school settings. RIDE continues to collaborate with DFCHE on thrive, RI's coordinated school health program. Even though funding was not awarded by the CDC in 2008, the website resource is maintained for each area of coordinated school health with RIDE and DFCHE contacts as appropriate. RIDE, DCFHE, and HEALTH's Center for Data and Evaluation administer the Youth Risk Behavior Survey every other year in RI high school and middle schools. DFCHE, HEALTH's Center for Data and Evaluation and RIDE produce reports linking key health indicators and academic achievement along with reports that illustrate the disparities in health across key populations including children with physical, emotional and/or learning disabilities and children who identify as gay, lesbian, bisexual or unsure.

The DCFHE works with RIDE to ensure an integrated educational system that serves YSHCN transitioning to adulthood. DCFHE participate on the legislatively mandated Transition Council that ensures youth with special needs transition from secondary education to employment or higher education. The OSHCN and RIDE partner on implementing the Dare to Dream Youth Conference and Mentoring Program that provides youth with special needs an opportunity for leadership development and peer to peer support. The OSHCN is a newly appointed member of

the Special Education Advisory Council. The DCFHE is working with RIDE and the RI School for the Deaf to coordinate and maintain follow-up for infants identified with hearing loss, to conduct two research studies related to hearing loss, and to develop systems related to school-based hearing screening and follow-up. DCFHE works with RIDE on a broad range of health issues as it relates to academic achievement. DCFHE and HEALTH's Center for Data and Evaluation develop joint publications with RIDE on links between health and academic success. DCFHE also, works closely with RIDE to address mental health supports, tobacco control, violence prevention, and overweight/obesity prevention in school settings. Although RI's coordinated school health program, thrive, did not receive funding from the CDC, the website maintaining the contacts and resources is sustained as well as the partnership to support coordinated school health efforts.

RI Department of Children, Youth & Families: The DCFHE is collaborating around data sharing via KIDSNET to better coordinate preventive health care for children in foster care. The DCFHE Family Outreach Program (FOP) is also working with DCYF in the implementation of new regulations regarding screening young children with substantiated cases of child abuse/neglect for Early Intervention eligibility. FOP nurse home visitors perform screening and serve as a liaison between DCYF and Early Intervention providers. DCYF is a full partner in the implementation of RI's Early Childhood Comprehensive Systems Plan. OSHCN partners with DCYF and DHS on the design and implementation of the children's behavioral health system in RI. OSHCN convenes and sponsors opportunities for family involvement and stakeholder participation in the children's behavioral healthcare system and the recently awarded Family Care and Coordinating Partnership (FCCP). The DCFHE participates on the Children's Trust Fund, which administers the state's primary and secondary prevention of abuse and neglect. Children's Neurodevelopment Center at Hasbro Children's Hospital (CNDC): The CNDC provides specialty and sub-specialty services to medically complex CYSHCN from birth to 21 years of age, including infants identified through newborn screening and is a DHS certified CEDARR Family Center. Via a cooperative agreement DCFHE supports and works closely with the CNDC on issues relating to quality of care, identification of services, access to reimbursement and family centered practices. Two parent consultants are assigned to work with the CNDC on these issues. The CNDC has access to KIDSNET to assure proper preventive services and coordination of care to children being seen at the CNDC and is in the process of managing the information technology for the PPEP through their electronic medical record.

RI Hearing Screening Assessment Program (RIHAP): RIHAP at Women & Infants Hospital provides support and follow-up for children with hearing impairments identified through the newborn screening process. The DCFHE participates on RIHAP's Hearing Screening & Follow-Up Committee. In addition, the DCFHE recently completed a Resource Guide for Families of Children Who Are Deaf or Hard of Hearing. Algorithms for medical homes and families to explain what to expect following newborn hearing screening have been produced.

RI Transition Council: The DCFHE continues to participate on the RI Transition Council, which was established by state statute to coordinate the activities of state agencies and school districts for youth with disabilities transitioning from school to adult life. The OSHCN is responsible for the development of an adolescent healthcare toolkit that is being used by the members of the Transition Council and their organizations, specifically,

school-nurse teachers, transition coordinators, RIDE administrators, Local Education Authorities' Special Education administrators and Vocational Rehabilitation Counselors.

Child Maltreatment Surveillance Project: DCFHE staff met with representatives from the Child Advocate's Office, the Medical Examiners' Office, the Attorney General's Office, DCYF, Brown University, and Hasbro Children's Hospital staff regularly to review mortality and morbidity incidents in RI. A group of researchers and physicians reviewed hospital discharge data (including emergency room data) of all fatal cases of children under 21 years of age who had one or more of 30 ICD-9 codes related to possible child maltreatment to look for "missed opportunities". In early 2008, the CDC published a chart book and provider reference guide in which RI's contributions to the document are well-noted.

RI Family Voices: The DCFHE works closely with leadership from the RI Chapter of Family Voices. The Director of Family Voices meets regularly with the DCFHE Medical Director and Chief of the OSHCN. The Director of Family Voices is a member of the SSI Team and assist in the administration of the PPEP. RI Family Voices is one of a few state Family Voices chapters to implement a Family-to-Family Health Information Center, funded under Medicaid and MCHB. Family Voices and the DFH have formed the Family Voices Leadership Team comprised of leadership from state agencies, community organizations, and service providers to address barriers to a coordinated CYSHCN service delivery system.

The Early Childhood Oral Health Coalition (ECOH): In collaboration with families and communities, the ECOH Coalition seeks to improve the oral health status and reduce disease disparities among young children by promoting effective oral health habits, expanding oral health and disease prevention knowledge, and advocating for improved access to oral health services.

RI Parent Information Network (RIPIN): RIPIN, a statewide, non-profit agency, provides information, training, support, and advocacy to parents seeking help for their children in RI. RIPIN provides training and administers the DCFHE Parent Consultant Program. In addition, the toll-free Family Health Information Line refers parents who express interest in child development, school readiness, literacy, discipline, violence prevention, disabilities, special education, transitions, and health-related issues to RIPIN and other appropriate community-based resources. RIPIN also provides training and support to Pediatric Practice Enhancement Project (PPEP) parent consultants. Parent consultants are also placed in the following DCFHE programs: Immunization, Birth Defects, and Adolescent Transition.

RI Chapter of the March of Dimes (MOD): The DCFHE collaborates with the MOD on several major initiatives. The first focuses on ensuring that women (especially low-income women) in RI have access to folic acid information and supplements prior to becoming pregnant or early in pregnancy in order to prevent birth defects. Another initiative is working to reduce prematurity in RI. A third initiative places family support in the state's only neonatal specialty care nursery, the NICU at Women & Infants Hospital and blends the expertise of a Parent Consultant and a MOD parent support professional to provide family support, education to families and staff, and referrals. DCFHE is working collaboratively with MOD to implement the expanded newborn screening panel to meet the recommendations of the American College of Medical Genetics. The DCFHE, in partnership with the MOD and Women and Infants Hospital, established a statewide Prematurity Task Force to identify and prioritize

recommendations to reduce premature births in RI. In November 2007, the top ten Task Force recommendations were presented at the MOD Prematurity Summit. During FY07, the Task Force has continued to work on implementing the recommendations.

Brain Injury Association of RI: The Traumatic Brain & Spinal Cord Injury (TBSCI) Program maintains a registry of individuals with traumatic brain and spinal cord injuries for the purpose of helping children and adults with TBSCI access appropriate services, including SSI and rehabilitative services. The program sends individuals with TBSCI a follow-up letter informing them of the Brain Injury Association of RI as a potential resource. With the passage of Rules & Regulations Pertaining to Traumatic Brain and Spinal Cord Injuries in July 2007, the OSHCN has seen a 500% increase in the reporting and linkage of victims and valuable information.

State Support for Communities

Ready to Learn Providence (R2LP): The DCFHE continues to support the Providence Plan's community-driven strategic planning initiative to increase utilization of MCH services (including CYSHCN services) among young families living in the city of Providence. R2LP, through federal Early Learning Opportunities Act funding, continues to implement activities relating to improving the quality of child care through expanding and better connecting providers to professional development, expanding the capacity and cultural competency of existing early childhood learning programs, and institutionalizing a kindergarten transition initiative designed to better prepare children for learning at school entry. Linking children, including CYSHCN, to needed health related services through a medical home represents an important part of R2LP activities. Parents participate in all phases of R2LP activities.

The DCFHE is currently participating in the several other community initiatives, including Warwick FOCUS, the Pawtucket/Central Falls CATCH, and Woonsocket CATCH. The DCFHE, in partnership with the Providence Plan and East Bay Community Action Program, applied and was selected to be one of seven teams to participate in the 2006-2007 City MatCH DaTA Institute: Data to Action for Effective MCH Leadership. The DaTA Institute is identifying community indicators for assessment, evaluation, planning and advocacy. DFCHE is working with the Woonsocket CATCH and Northern RI Area Health Education Center on an adolescent medical home pilot project DCFHE. The DCFE Health Promotion & Wellness Team contracts with multiple MCH partners working with schools and CBOs to reduce childhood obesity, tobacco use and exposure among pregnant women and children, and suicide among teens and young adults.

Child Care Support Network supports healthy child care environments through contracts to local community agencies. These agencies have staff that conduct technical assistance to child care providers to help them promote children’s mental health and healthy development. The project also helps ensure that efforts around the state to promote children’s healthy development are coordinated.

Successful Start: The Successful Start Early Childhood Comprehensive Systems initiative engaged in a two-year, statewide planning effort to assess capacity, quality, and integration issues surrounding five core components of the state's existing early childhood system. The five core components include medical homes, social

and emotional development, child care, parenting education, and family support for all children, including CYSHCN. Beginning in Fall 2005, the plan developed for Successful Start will go into implementation. Parent involvement will be a key to success in the implementation phase. Last Fall, Successful Start published its Early Childhood Systems Plan. Many key elements of the plan are underway, including support for local communities and neighborhoods to integrate developmental screening into medical homes, offer multidisciplinary training in infant and early childhood mental health, and build capacity for child care health and mental health consultation.

Coordination with Health Components of Community-Based Systems

DCFHE staff participate on the Governor's Council on Mental Health, the Permanent Legislative Commission on Child Care, Governor's Commission on Permanent TBI, Joint Commission to Study the Education of Children with an ASD, and the RI Transition Council (for youth with disabilities transitioning to adulthood). The DCFHE has also participated on numerous other shorter-term legislative initiatives, including recent ones focusing on childhood lead poisoning, tobacco control, injury prevention, and childhood obesity. DCFHE staff are also members of the Governor's Commission on Disabilities and the Governor's Interagency Coordinating Council for Early Intervention. DCFHE staff participated on a legislative work group on vision screening.

The Perinatal and Early Childhood Team coordinates with a number of existing systems relevant to children's health care. Watch Me Grow RI, the Family Outreach Program, and the Child Care Support Network all coordinate with SCHIP, Early Intervention, the system of Community Mental Health Centers, and the Child Care Subsidy system. The Newborn Screening program coordinates with the birthing hospitals, the State Laboratory, and the RI Hospital. The Lead Poisoning Prevention Program also coordinates with Medicaid, the states system of Lead Centers and the two lead clinics in the state which provide medical treatment for significantly lead poisoned children.

The Adolescent Health Program in partnership with the RI Public Health Institute and with a small planning grant from the RI Foundation is conducting a feasibility study for a mental/behavioral health resource center for RI schools. This project is in response to schools' ongoing challenges coping with mental/behavioral health issues that are barriers to school success and their expressed need for support. Bradley Hospital is interested in participating with us in developing a model center and has included language in its certificate of need application that commits Bradley to working with us on this issue.

The Adolescent Health Program in partnership with the Northern Rhode Island Area Health Education Center is working on the development of adolescent medical homes in Woonsocket RI. A needs assessment was conducted among providers, adolescents and parents to identify issues of mutual concern. The community will meet to determine next steps in building this model for area teens.

Watch Me Grow RI is a program that provides support to pediatric primary care providers and child care providers to implement developmental screening within community based settings. WMGRI also provides technical assistance around understanding community services and how to refer/link to these services. As a result of the AAP

recommendation around autism specific screening in addition to standardized developmental screening, WMGRI and the OSHCN provides technical assistance on standardized measures of development.

The DCFHE has established advisory committees and workgroups for many of its programs that include professional and consumer representation. Current DCFHE advisory and workgroups include the Childhood Immunization Action Coalition, Immunization Physician Advisory Committee, Women's Health Screening & Referral Program (WHSRP) Advisory Committee, Family Resource Counselor (FRC) Network, CCSN Advisory Board, Successful Start Steering Committee, WIC Vendor Advisory Council, Healthy Housing Collaborative, Birth. Defects Advisory Council, PRAMS Steering Committee, newborn screening advisory committees, RI Prematurity Task Force, Healthy Homes Collaborative, Autism Spectrum Disorder Advisory Board, Family Voices Leadership Team, Injury Community Planning Group, Sexual Violence Prevention Planning Committee, the Tobacco Control Coalition, and the Healthy Eating and Active Living Collaborative.

Coordination of Health Services with Other Services at the Community Level

The Newborn Screening Program coordinates with community based and hospital based programs, which address the needs of families with children who have specific disabilities and disorders. The Newborn Screening Program provides universal newborn screening and follow-up for a growing list of metabolic, endocrine, and blood disorders. The program also provides hearing screening and developmental risk assessments for newborns. Implementation of a newborn developmental risk module, integrated with a new electronic birth certificate system, began in May 2003. Consumer input into genetics and newborn screening policy development was obtained through outreach, focus groups, surveys, and other means. The DCFHE worked closely with local hospitals to implement the integrated electronic developmental risk assessment/birth certificate system in RI. The DCFHE is currently working with hospitals, specialty clinics, and pediatric providers to implement an expanded panel of conditions for newborn screening.

OSHCN and parent consultants worked with parents to develop "medical passports" for families with CYSHCN, which contain information about services for CYSHCN and their families in RI. The DCFHE will also continue to work with the New England Regional Genetics Group (NERGG) for technical assistance in implementing HEALTH's statewide genetics plan. The genetics plan focuses on access to genetics services, including genetics counseling. In early 2008 a parent consultant was added to RI’s genetic team.

The Birth Defects Program is working to ensure that children with birth defects have a medical home and that families have access to preventive services. The DCFHE designed a template for birth defects, a data book, and newsletter. The DCFHE has worked closely with its Birth Defects Advisory Council to design and pilot a checklist of services for specific conditions that families and health care providers will complete.

The Birth Defects Program parent consultant has been coordinating focus groups with families of children with birth defects to learn about their experiences with the health care system, identifying any barriers to or gaps in services and developing strategies to elicit parent input in data collection; working closely with community agencies /families to determine the need for educational materials; helping to monitor the program to ensure that all children

with birth defects have a medical home. A parent consultant works with the Advisory Committee to develop/implement statewide birth defects prevention strategies

Birth Defects Program began exploring the possibility of working with the Pediatric Practice Enhancement Program (PPEP) and the RI Parent Information Network to obtain service and referral information for children with birth defects. PPEP parent consultants based in pediatric offices and clinics could obtain this information from families and medical records. The Birth Defects Program also worked closely with hospitals and clinics to enhance and expand case ascertainment and planned the 2nd annual Birth Defects Grand Rounds and Forum on fetal alcohol syndrome. Community organizations that serve children with birth defects were invited to set up informational tables at the forum.

Community Health Centers: A significant proportion of DCFHE investments support activities in community health centers, including Family Resource Counselors (FRCs), WIC, Family Planning, PPEP Parent Consultants, PAHI Peer Resource Specialists, WHSRP, Tobacco Cessation and two SBHCs. The DCFHE works directly with individual community health centers on an ongoing basis. The DCFHE also works with the RI Health Center Association on larger policy issues impacting community health services delivery.

Hospitals: The DCFHE has strong partnerships with several hospitals in RI. DCFHE provides funding to the Children's Neurodevelopment Center (CNDC) at Hasbro Children's Hospital (pediatric division of RIH) for follow-up to Newborn Screening and care coordination to medically fragile children. The Newborn Screening Program works closely with Women & Infants' Hospital and other birthing hospitals in RI around training and quality assurance. The Newborn Screening Program also works closely with metabolic, cystic fibrosis, and hemoglobinopathy clinics at Rhode Island Hospital for diagnosis, treatment, and follow-up. The DCFHE supports lead and immunization clinics for uninsured children at Rhode Island Hospital and St. Joseph Hospital. The Birth Defects Program has been working closely with Women & Infants', Kent County, and Hasbro Children's Hospital to improve case ascertainment. Representatives from these hospitals provide information, consultation, and guidance; several are members of the Birth Defects Advisory Council. Through the PPEP and PAHI programs, Hasbro Children's Hospital, Memorial Hospital, Women & Infants' Hospital, Butler Hospital and St. Joseph’s hospital have a trained family / peer resource specialist to ensure access to care. The DCFHE Works with Bradley Hospital (the state's psychiatric hospital for children and adolescents) on a mental health resource guide.

Insurers: The DCFHE works collaboratively with the state’s two managed care plans insuring CYSHCN to increase access and care coordination. The state’s largest Medicaid insurer participated in the evaluation of PPEP. The utilization analysis that was presented to all RI health plans demonstrated that CSHCN who received PPEP services had lower health care costs as they had higher utilization of community based services and lower institutional level of care services. PPEP Parent Consultants help families of children with children with special health care needs receive appropriate primary care and attain/maintain health insurance. The DCFHE continues to work with the three Managed Care Medicaid organizations in RI to share lead screening data and increase screening rates for the vulnerable Medicaid population.

Child Care Providers: The Child Care Support Network (CCSN) works closely with the child care provider community and families. CCSN is made up of a team of professionals who work with licensed center-based and

home-based child care providers to improve the quality of care for all children in the following areas: health and safety, nutrition, curriculum development, early literacy, CSHCN, child development, family involvement, and mental/behavioral health.

Healthy Mothers/Healthy Babies Coalition: The DCFHE participates in this statewide coalition dedicated to improving birth outcomes. Associated with the Rhode Island Chapter of the March of Dimes, members include state departments, community agencies, and providers. Healthy Mothers/Healthy Babies participates on the PRAMS Steering Committee.

Rhode Island KIDS COUNT: This children's policy organization provides information on child wellbeing and stimulates state dialogue on children's issues. Each year, the agency publishes a factbook, which provides detailed community-by-community pictures of the condition of children in RI. The DCFHE a significant proportion of data utilized in the factbook, including data on lead poisoning, WIC, CSHCN, breastfeeding, prenatal care, low birth weight infants, infant mortality, and births to teens. Kids Count is also a member of the Birth Defects Advisory Council and PRAMS Steering Committee. RI Kids Count is also a key partner in Successful Start and is contracted to assist in statewide early childhood policy development.

Family Leadership & Support Programs: The DCFHE actively collaborates with a number of family leadership and parent support agencies and programs. The DCFHE works closely with leadership from the RI Family Voices and participates in the Family Voices Leadership team. The DCFHE also contracts with the RI Parent Information Network (RIPIN) to provide training and technical assistance to the Parent Consultant Program. DCFHE staff and especially the OSHCN work extensively with family organizations, namely, Family Voices of RI, the RI Parent Information Network, Sherlock Center for Disabilities and Parent Support Network. As these organizations support families raising children with special health care needs, HEALTH provides funding and direction to empower and inform parents and leaders. The DCFHE is developing a Family Leadership Development Institute to support families who work or volunteer in family support roles.

Higher Education: HEALTH and the DCFHE have active relationships with many of the state's colleges and universities. Many DCFHE programs have hosted student interns, and currently interns work in the Lead Program and the Data and Evaluation Unit. In addition, HEALTH is working to develop formal agreements with area institutions of higher education to facilitate HEALTH staff training and collaborative research and grant writing. In partnership with Rhode Island College, the Lead Program offers training to nursing students about environmental threats in the home. The DCFHE is also working with the RI Area Health Education Center (housed at Brown University) to develop and offer multidisciplinary training on early childhood mental health and with the Northern RI AHEC on a model for adolescent medical home in the Woonsocket area. Through the Joint Legislative Commission on the Educating Children with Autism Spectrum Disorders, the DCFHE is designing a teacher competency certification in ASD and incorporating these competencies into undergraduate special education curriculum. The DCFHE partners with Brown University faculty on a variety of special needs, especially Autism and other developmental disabilities.

5. Selection of State Priority Needs

In order to develop and implement priorities for Rhode Island's Title V MCH Program, it is first necessary to understand the health needs of the state's entire population and the general health care delivery environment. Other issues, such as the geographical and cultural characteristics of a state and its localities (including their governmental structures) and economic and educational characteristics, also impact the health and human services needs of a population.

Equally important is an understanding of the key policy issues currently being debated in Rhode Island's public arenas. Current agenda items include tax relief, health care, jobs and economic development, education, affordable housing, and welfare reform. However, the state's safety net infrastructure has been damaged by cuts made in response to the fact that Rhode Island is now in an economic recession.

Rhode Island is awaiting results form the United State Census however, demographic data indicate that, by 2010, Rhode Island will be older, have fewer workers in their prime productive years, and be less self-sufficient, and more reliant on government assistance, requiring continued taxpayer investment in entitlement programs and fundamental public services. At the same time, the majority of state's voters believe that taxes are higher in Rhode Island than in other states and that the state is not doing enough to keep from raising taxes.

Geographical & Cultural Characteristics

The state of Rhode Island is a small, coastal area (1,214 square miles) with just over one million residents (1,067,610). The entire state measures just 48 miles, from north to south, and 37 miles, from east to west. Historically, most Rhode Islanders have been White descendants of European immigrants, plus some long established African American families and members of the small Narragansett Native American Tribe.

With the establishment of the first water-powered cotton mill in the nation in Pawtucket in 1793, Rhode Island became the birthplace of the industrial revolution in the United States. Since then, waves of immigrants – from the Italians, Irish, French/French Canadians, and Portuguese in the late 19th century to the Asians and Latinos in the late 20th century – have come to Rhode Island in search of a better life.

Currently, 12.6% of Rhode Islanders are foreign-born, which ranks the state the 13th highest in the nation in this respect. Of the total foreign-born population in Rhode Island, 30.4% entered the state prior to 1980, 21.8% between 1980 and 1989, 24.7% between 1990 and 1999, and 23.1% in 2000 or later.

The largest share of the foreign-born population in Rhode Island is from Latin America (40.4%), followed by Europe (26.2%), Asia (15.3%), Africa (12.2%), and Northern America (5.5%). The top three counties of birth for Rhode Island's foreign-born residents are Portugal (14.1%), The Dominican Republic (13.5%), and Guatemala (9.3%). In 2005, 43.8% of the state's foreign-born residents were citizens.

The foreign-born make up 1.7% of young children in the state, 5.0% of youth, and 15.0% of working-age adults. Among people at least five years old living in Rhode Island in 2005, 20.4% spoke a language other than English at home. Of those speaking a language other than English at home, 48.7% spoke Spanish and 51.3% spoke some other language.

The three largest ancestral groups in Rhode Island are Italian, Irish, and French-Canadian. Rhode Island has a higher percentage of Italian Americans and persons of Portuguese ancestry, including Cape Verdeans, than any other state in the nation. Mainly due to large Irish, Italian, and French-Canadian immigration and, to a lesser extent, Portuguese, Puerto Rican, and Cape Verdean communities, Rhode Island has the highest percentage (63.6%) of Roman Catholics in the nation.

In 2006, there were 405,627 households in Rhode Island. The average household size was 2.5 people. Families make up 64.7% of the households in Rhode Island. This figure includes married-couple families (47%) and other families (17.7%). Rhode Island has the 7th lowest percentage of married-couple families living with their own children in the nation.

Although Rhode Island ranks high in percentage of forested land (60%), 75% of its population resides in a 40-mile long urban/suburban corridor along the shores of Narragansett Bay and in the valleys of the Blackstone and Pawtuxet Rivers. This corridor, which includes Providence, contains nearly all of the state's public infrastructure, major transportation routes, and institutional and cultural centers. Providence, the second largest city in New England after Boston, is a major metropolitan community in which an estimated 170,435 residents live.

Providence is one of Rhode Island's six (6) designated "core" communities, defined as being a city or town in which more than 15% of the children live in poverty. Rhode Island's other core communities include Pawtucket, Central Falls, Newport, Woonsocket, and West Warwick. Thirty-four (34.2%) percent of the state's population resides in these six core communities, where 37.3% of children under six (6) years and 33.9% of children under eighteen (18) years live below poverty.

According to the U.S. Census, the racial/ethnic distribution of Rhode Island's population in 2006 consisted of Whites (82.6%), Blacks (5.1%), Asians (2.8%), Native Americans (0.4%), Native Hawaiian or Pacific Islander (0.02%), those who identified themselves as being some other race (6.9%) and those who identified themselves as being two or more races (2.2%). From 1990 to 2000, Rhode Island's non-Hispanic White population declined by 4%. During the same period, the state's Black population increased by 21%, Asians by 31% and Native Americans by 26%.

Blacks represent the largest racial minority group (and the second largest minority group) in the state. Rhode Island's Black population became increasingly diverse during the 1990s as a result of increased immigration from Haiti, Cape Verde, Liberia, and Nigeria. Rhode Island's Liberian population, conservatively estimated at 15,000, constitutes the largest per capitol Liberian population in the United States. In addition, 10% of the Black population in the state is Latino, a large majority of which came from the Dominican Republic.

The state's Asian population grew by 31% during the 1990s. Most Southeast Asians immigrated to Rhode Island from the war-torn countries of Vietnam, Cambodia, and Thailand during the 1970s and 1980s. From 1975-1979, well-educated professionals escaped from Cambodia and after a brief stay in Thai refugee camps, were resettled in the United States (including in Rhode Island) and Canada. From 1979-1985, Cambodians continued to resettle, and larger numbers of rural agrarian families arrived in the United States, including Rhode Island. According to the 2000 U.S. Census, Rhode Island's Cambodian refugee population is the 7th largest in the United States.

The Native American population grew by 26% during the 1990s, consisting primarily of members of the Narragansett Indian Tribe. Native Americans live in Providence, Narragansett, North Kingstown, and Charlestown. The Narragansett Reservation near Charlestown currently is about 2,500 acres in size and has a population of about 2,500 residents, however, the actual number of Native Americans living in Rhode Island remains very small (5,389). However, more striking than any other trend was the surge in the number of Latinos in the state. Latinos saw their numbers double in Rhode Island in the 1990s from 45,572 to 90,820, a pace double that found in Massachusetts. In 2005, Latinos made up 10.9% (112,722) of the state's population (an increase of 24% since 2000). Thirty six percent (36%) of Rhode Island's Latinos are children. The majority of Latinos in Rhode Island (63.9%) come from Puerto Rico (28%), the Dominican Republic (19.7%), Guatemala (9.9%), and Columbia (6.3%).

Rhode Island's children are diverse in race, ethic background, language, and country of origin. In 2006, there were 9,848 foreign-born children under age 18 living in Rhode Island, representing 4% of the state's child population. In Rhode Island, 78% of children ages 5-17 speak only English, 14% of children speak Spanish, 6% speak other Indo-European languages, and 2% speak Asian or other Pacific Island languages.

Of Rhode Island's immigrant children, 42% are from Mexico, Central, or South America; 29% from the Caribbean; 11% are from Europe; 11% are from Africa; and 6% are from Asia. Minority and immigrant children and their families are highly concentrated in the six core cities in Rhode Island. More than half (58%) of children living in the state's core cities are minority children. More than three-quarters (78%) of all minority children live in these six communities. Rhode Island has the highest percentage of Hispanic children living in poverty (79%) and fourth largest percentage of black children (71%) living in neighborhoods in which more than 18% of persons are in poverty in the nation.

According to the US Census, after gaining small numbers of people from other states from 2001 to 2003, Rhode Island began experiencing decreases in its population in 2004, with an estimated net loss of 2,114 people. In 2005, the estimate was a net loss of 11,618, and in 2006, a net loss of 12,566. Rhode Island was one of only four states to see its population decrease in the US Census Bureau's annual estimates in 2006. The decline in Rhode Island's population is being driven by the migration of young, college-educated people looking for better job opportunities and more affordable housing in other states.

State & Local Government Structure

Rhode Island has advantages for effective public health program implementation, given its small geographical size and unique governmental structure. With the exception of the state court system, there is no county level of government in Rhode Island. The state is made up of 39 cities and towns ranging from 1.3 to 64.8 square miles in size. In Rhode Island, local communities possess control in areas such as primary and secondary education, subdivision of land and zoning, and housing code enforcement. A combination of cultural, socio-economic, and transportation-related factors makes "the neighborhood" the most important level of community in many parts of Rhode Island, especially low-income communities.

In preparation for the State Fiscal Year 2011 budget, the Governor proclaimed that the impact on the recession on the State of Rhode Island has been severe, with over 73,500 Rhode Islanders unemployed. Through

December 2009, Rhode Island had a net loss of 42,500 jobs from January 2007, the peak of employment in Rhode Island. The jobless rate peaked at 13.0% in September and the State currently ranks third in the nation with a 12.9% of unemployment as of December 2009. The State has depleted the resources it set aside to pay unemployment benefits and is now borrowing from the Federal Trust Fund to make benefit payments to unemployed Rhode Islanders. The impact of the high level of unemployment has translated into a sharp decline in tax receipts to the State, as less personal income taxes are received from employers through withholding taxes, and taxpayers transmit lower estimated and final payments, but request larger refunds. The recession has also affected housing and spending, which generate the state's second largest source of income sales and use taxes. Public and private sector stakeholders are working to break this negative cycle and reverse the economic trend.

The Rhode Island Department of Health (HEALTH) is the sole public health authority that makes it legally responsible for the provision of core public health activities at both the state and local levels. HEALTH contracts with community-based organizations and professionals to provide nearly all direct preventive and public health services. The absence of local health authorities means that health care providers in the state look to the HEALTH for policy guidance and other forms of assistance. The state's Title V MCH Program is located in the HEALTH.

Economic Needs of the State's Population

In earlier generations, Rhode Island workers were well-paid and well-insured for health care through the presence of its strong manufacturing base. However, many manufacturing jobs were lost in recent decades, and in the 1990s, Rhode Island experienced its worst recession since the Great Depression, losing 11.6% of its total job base. By 1992, Rhode Island's unemployment rate, at 9.1%, was the 4th highest in the nation.

After weathering the financial storms that battered the state in the early 1990s, Rhode Island rode a wave of economic growth in mid-1990s. Taking advantage of a strong economy, the state was able to reduce taxes, increase state spending by double and triple the rate of inflation, and still realize $100 million end of year surpluses. When the national economy faltered in 2001, most states were hit a lot harder than Rhode Island. The restructuring of Rhode Island's economy during the 1990s has been proposed as one of the reasons for Rhode Island's resilience during this period.

However, on April 28, 2008, Economy.com (which is owned by Moody's Investor Services) and the international consulting firm Global Insight informed state officials participating in Rhode Island's annual Revenue & Caseload Estimating Conference that Rhode Island stands alone as the only Northeastern state "in recession" and that the state's employment figures, foreclosure rates, and personal income growth are worse than its New England neighbors and national averages. It was noted that the state is just one of nine states in recession – the next closest is Ohio. Rhode Island was the only New England state to report negative employment growth between March 2007 and March 2008.

The lack of affordable housing is a pressing problem in Rhode Island. A 2005 report by the National Low Income Housing Coalition found that Rhode Island faced a shortage of 11,000 housing units for residents earning 30 percent or less of the statewide median income, or $19,397 a year. Rhode Island ranks among the 10 least-affordable states in the country. Unfortunately, the state's affordable housing programs have been cut. The state's

Neighborhood Opportunities Program — the seven-year-old fund that helps finance affordable housing for those who make less than $30,000 a year —was allotted $5 million of their $7.5-million budget for FY2009. An additional $26 million was cut from Rhode Island Housing Corporation's budget for FY2009

RI also has the highest mortgage delinquency rate in New England. Rhode Island foreclosure rates have been rising since the end of 2005. In 2008, according to Rhode Island Housing Corporation data, of the nearly 3,000 properties in Rhode Island advertised for foreclosure during the 12-month period that ended March 31, 2008, 79% were in the cities and inner suburbs: Providence, Cranston, Johnston, East Providence and Warwick. Providence, with 1,543 foreclosure initiations, accounted for 52% of the total. Suburban and rural areas also experienced more foreclosures.

In Rhode Island, where house prices have increased ahead of growth in wages, 17% of households spent more than half their income on housing in 2005. Rhode Island is now one of 13 states – including Massachusetts, Connecticut, and New Hampshire – where more than half of all low-income households spend more than half of their income on housing. The disconnect between incomes and housing costs in Rhode Island is expected to persist into the next decade, as low-wage service jobs are added to company payrolls. Currently, a family with a household income of $51,814 (the median household income in 2006) cannot afford a median-priced, single-family home in any community in the state.

Educational Needs of the State's Population

According to RI KIDS COUNT, the Rhode Island four-year graduation rate for the class of 2009 was 75%, the dropout rate was 14%, 5% of students completed their GEDs within four years of entering high school and 6% were still in school in the fall of 2009. Poverty is strongly linked to the likelihood of dropping out. Students in the core cities in Rhode Island are more than twice as likely to drop out of high school as students in the remainder of the state. Minority students also are more likely than White students to drop out of school. However, lower graduation rates in minority communities mainly are driven by higher poverty rates and lower rates of educational attainment among adults in the community. The Rhode Island four-year graduation rate for the class of 2009 was 71% for males and 80% for females.11 While female students have lower dropout rates than males, national data show that female dropouts are significantly more likely to be unemployed and earn less on average than male dropouts from the same racial and ethnic group.

Rhode Island's education accountability system is designed to promote an increase in educational outcomes so all students reach proficiency by 2014, as required by the federal No Child Left behind Act of 2001. Schools are classified by their performance on 37 indicators by the Rhode Island Department of Elementary and Secondary Education. Classification levels include: "Insufficient Progress," "Caution," "Met Adequate Yearly Progress (AYP)," and "Met AYP and Commended." In Rhode Island in 2009, 225 schools (76%) were classified as "Met Adequate Yearly Progress (AYP)," 16 additional schools (5%) were classified as "Met AYP and Commended," 12 schools (4%) were classified as "Caution," and 44 schools (15%) were classified as making "Insufficient Progress." Schools that do not miss any current targets are classified as "Met AYP." Schools that achieve exceptionally high performance in English or Mathematics for two years, make significant progress for two

years or significantly closed achievement gaps between student groups are designated as Regents Commended Schools ("Met AYP and Commended"). Schools that miss up to three targets for the first time (other than school-wide English and mathematics targets) may be classified as "Caution" for one year only. Schools that miss a school-wide English or math target, more than three targets, or schools that miss any target for multiple years are classified as making "Insufficient Progress." Schools that are classified as making "Insufficient Progress" may face state interventions, including the implementation of a corrective action plan or restructuring by the state.

Until 2010, Rhode Island was the only State in the nation without a school funding formula. This year, the RI State Legislature passed and Governor Carcieri signed into law a statewide funding formula. The funding provides a base funding that follows the child and provides additional funding for children with special needs including health concerns and poverty levels.

In 2000, 78% of Rhode Island adults had a high school diploma. The proportion of residents age 25 and older with at least a high school diploma is the smallest among the six New England states, and the proportion with at least a four-year college degree is the second worst - ahead of only Maine**.** In 2006, Beacon Hill Institute gave Rhode Island a competitiveness ranking of 36th worst of 50 states on its "percent of population aged 25 years and above that graduated from high school." Currently, almost 44% of workers in the state have a high school degree or less.

According to the Rhode Island Economic Policy Council (RIPEC), an advisory panel made up of leaders in government, education, and business, the average level of education in the state is declining at the same time that the skills required by employers are rapidly increasing. Of Rhode Island's one million residents, 142,000 adults lack a high school diploma and 35,500 have limited English language skills. By 2010, the share of the workforce that has not graduated from high school is expected to increase in Rhode Island, while the percentage of workers who have graduated from college, including those with a graduate degree, will drop, according to data from the National Center for Public Policy and Higher Education.

According to the Nellie Mae Foundation, the percentage of young workers in Rhode Island holding a bachelor's degree or higher will drop by 3%-4% by 2020 since Blacks and Hispanics (the fastest growing demographic groups in the state) have not been making the gains necessary to compensate for the exodus of Whites. Further, nearly half of all new college enrollments in Rhode Island originate from out of state (more than any other New England state) and many of these students choose to leave the state when they graduate.

Social Service Needs of the State's Population

Economic forces and the educational needs of a community, coupled with the demographic and cultural characteristics of the population, impact the social service needs of individuals and families**.** In 2005, 12% of Rhode Island's population lived in poverty. Although this percentage is comparable with the percentage for the nation as a whole (13%), it is higher than every other state in New England.

In 2006, the proportion of children under age 18 as a proportion of the population in poverty in Rhode Island was 15.1%, which was lower than the nation (18.3%). Rhode Island ranked 17th in the nation and 5th in New

England, whereas only 9% of White children in Rhode Island live in poverty, 36% of Black children, 36% of Hispanic children, and 14% of Asian children live in poverty.

The Family Independence Program (FIP) is the state's welfare reform program, as set forth in the Rhode Island Family Independence Act of 1996. FIP seeks to help low-income families by providing the supports (including subsidized health insurance, childcare, and work-readiness activities) that families need in order to obtain and keep a job. Between 1996 and 2007, there was a 46% decline in the state's FIP caseload, from 18,428 cases to 9,993 cases.

As of December 2007, there were 6,242 adults and 17,808 children under the age of 18 enrolled in FIP. Three-quarters (74%) of all FIP beneficiaries were children under the age of 18. More than 2 in 5 (44%) children enrolled in FIP were under the age of six. In Rhode Island, 77% of the families enrolled in FIP have one or two children.

Rhode Island, under the childcare law (Starting Right), is the only state that has a legal entitlement to a childcare subsidy for income-eligible working families. Until 2007, working families with incomes up to 225% of the federal poverty level were entitled to a childcare subsidy for their children up to age fifteen. Co-payments were required for families with incomes over the federal poverty level. In 2007, eligibility for child-care subsidies was reduced from 225% of the FPL to 180% and the age eligibility was rolled back to age 12. Rates to providers have been frozen since 2004 at the 2002 market rate level. These changes resulted in the removal of 1,743 children from Starting Right in 2007. In 2007, the number of children receiving subsidies dropped to 9,008.

Currently, Rhode Island is the 5th least affordable state in a United States for a 4-year old in a child- care center. In Rhode Island, the average cost of full-time child-care for a preschooler consumes 45% of the median single parent family income and 10% of the median two-parent family income. Using the federal affordability guideline that families should spend no more that 10% of their gross income on childcare, a Rhode Island family would need to make at least $87,000 a year to afford the average cost of child-care for a 3-year old at a licensed center ($8,736).

The shortage of affordable apartments and increasing energy costs in the state is causing an increasing number of Rhode Islanders to seek shelter in the state's emergency shelter system. For the fifth year in a row, Rhode Island's emergency shelter system provided record nights of refuge to more people in 2006 (6,889 individuals) than the previous year. The number of families seeking shelter has increased 50% since 2000/2001. Eighteen percent (18%) of the 5,511 adults who entered the shelter system in 2006 entered as adults with families. Twenty-percent (20%) of the 6,889 individuals who entered the shelter system were children (1,378).

Health Care Needs of the State's Population

Rhode Island enjoys the second highest prenatal care rate (90.9%), the 4th lowest obesity rate (17%), the third lowest child death rate (15 per 100,000 children), the second lowest teen death rate (31 per 100,000 teens), the fifth lowest firearms death rate 5.1 per 100,000 population), the sixth lowest per capita rate of suicides (0.078 per 1,000 population) in the nation.

Unfortunately, it also has the third highest rate of cancer incidence (510.5 per 100,000 population) and the third highest homicide rate for victims aged 18-24 years (34.1%). Among people at least five years old in 2005, 16% reported a disability. The likelihood of having a disability varied by age – from 9% of people 5-20 years old, to 13% of people aged 21-64 years old, and to 39% of those 65 years and older.

Rhode Island filed and was granted a waiver for comprehensive Medicaid reform, which would set aside many traditional Medicaid requirements for up to five years, with the promise of substantial savings to help deal with the state's "structural deficit". Since much of the current MCH system is built on RIte Care plan services, and on targeted case management, many advocates and partners are worried about the "global waiver" plan. The RI Department of Health participates in governance groups related to the implementation of the Global Medicaid Waiver resulting in the expansions of EPSDT standards to include oral health, developmental and autism screening, and other provisions of Bright Futures 3.0. It is vital to keep up MCH data and input channels (KIDSNET, PRAMS, TWOS, etc) to monitor and manage impacts on vulnerable children and families.

Economic trends, and the educational and social services needs of a community, coupled with the demographic and cultural characteristics of the population, impact the health care needs of individuals and families. In 1979, 74.4% of working Rhode Islanders had employment-based health insurance. By 2003, only 57.1% of workers received coverage through private employers.

The state’s Medicaid managed care program, RIte Care, has had a profound impact on the state’s health care system. Three carriers participate in RIte Care. Neighborhood Health Plans of Rhode Island (NHPRI) has a market share of 59% and UHPNE controls 29%. The remainder of the market (12%) consists of BCBSRI through its Blue Chip Program. The majority of NHPRI’s clients access services through the state’s community health center network, while UHCNE and BCBSRI clients access services through private providers or hospital-based clinics.

According to RI Kids Count, between 2006 and 2008, 7.0% of Rhode Island’s children under age 18 were uninsured, compared to 10.8% of children in the U.S. Rhode Island ranks 14th best in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents’ employers. An estimated 4,983 uninsured children under age 19 live in Rhode Island families with incomes at or above 250% of the federal poverty level ($44,000 for a family of three in 2008), the limit for RIte Care eligibility. Between 2006 and 2008, approximately 72% (13,078) of the estimated 18,141 uninsured children in Rhode Island were eligible for RIte Care based on their family incomes but were not enrolled. Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from 73.3% between 1999 and 2001 (an 8% decline). The cost of health care coverage for families has increased faster than wages in every state over the past decade. Between 1999 and 2009, health care premiums in Rhode Island increased by 122%, compared with 38% wage growth.16 In 2008, the average annual cost for a family policy in Rhode Island was $13,363, compared with $12,298 in the U.S. Rhode Island’s RIte Share premium assistance program helps low-income families to afford the cost of employer-sponsored coverage. RIte Care provides coverage to children up to age 19 in families with incomes up to 250% of poverty. RIte Care also covers parents of eligible children in families with income up to

185% of poverty. RIte Care expanded eligibility to include pregnant women up to 350% of poverty and childcare providers who serve low-income children. As of December 31, 2007, 70% (77,054) of the RIte Care members who qualified based on family income were children under age 19. There were 39,186 low-income parents enrolled in RIte Care as of December 31, 2007. Of these parents, 16% (6,242) received RIte Care because they were enrolled in the Family Independence Program (FIP).

In April of 2001, the Rhode Island Department of Human Services (HEALTHS) launched the RIte Share initiative as a way to control increasing costs associated with RIte Care and to strengthen the employer-sponsored health insurance infrastructure in the state. RIte Share requires RIte Care applicants with access to employer-sponsored insurance to participate in their employer's insurance plan. RIte Share pays the employee's share of the cost for enrolling in an approved employer-sponsored family or individual health insurance plan. Eligibility guidelines are the same as for RIte Care. RIte Share provides the full range of RIte Care benefits to families by covering RIte Care services not included in the employer's health insurance plan. As of December 31, 2009, 7,234 children and 3,143 parents (10,377 total) were enrolled in RIte Share.

Rhode Islanders with the highest un-insurance rates are young adults ages 18-34 years (18.5%), adult males ages 16-64 years (12.8%), adults living in families without children (12.6%), adults with family annual incomes less than $25,000 (23.1%), and unemployed adults (30.4%). However, the rise in un-insurance in 2003 compared to the previous year is seen primarily among young adults (a 10.1% increase), women (a 15.5% increase), families with children (a 5.8% increase), middle-income households (a 34% increase), and the employed (a 9.2% increase). Uninsured Rhode Islanders access services through the state’s CHC network and through hospital emergency rooms.

Over 40% of Rhode Island adolescents aged 12-21, with private health insurance, did not receive an annual preventive care visit. Although RI does better that the national benchmark of 59% for private health plans, the numbers indicate that adolescents are not receiving preventative services on a regular and consistent basis.

Rhode Island’s emergency room current utilization rates exceed the United States and Northeast averages by 4% and 9%, respectively. Based on these rates and the projected population, emergency room visits in Rhode Island will total 460,000, nearly 30,000 more emergency room visits as compared to 2000. As expected, young working age individuals (18-44 years), including the uninsured, comprise the largest population (44%) of these visits. In the absence of a state-supported hospital, all of the hospitals in the state are legally mandated to treat the uninsured.

With respect to mental and behavioral health needs of the state’s population, the rate of non-federal acute hospital discharges with a principal diagnosis of a mental disorder, including substance abuse (MD/SA), was substantially higher in Rhode Island (11.9 per 1,000 population) than nationally (7.7) in 2004. The total number of discharges with a principal or secondary diagnosis of MD/SA comprised more than one-quarter (27.7%) of all discharges (excluding newborns) from these facilities. This data indicates that hospitalizations of persons with a diagnosis of MD/SA comprise a large proportion of the inpatient care provided in Rhode Island’s hospitals. The majority of such patients have an MD/SA diagnosis secondary to a principal diagnosis of a physical illness or injury.

National Survey on Drug Abuse & Mental Health data (2004) seems to support that Rhode Islanders experience higher rates of substance abuse and serious psychological distress compared to other New England states. Rhode Island has the highest percentages of past year any illicit drug dependence or abuse (3.49%), past year cocaine use (3.52%), past year alcohol dependence or abuse (9.59%), and past year serious psychological distress (12.18%). It also had the highest percentages of individuals needing but not receiving treatment for illicit drug dependence or abuse (3.06%) or alcohol dependence and abuse (8.91%). Rhode Island also has the highest percentage of alcohol related traffic fatalities (50%), the second highest percentage of heavy drinkers (7.3%), the third highest percentage of binge drinkers (18.2%) in the nation.

In Rhode Island, private insurance rates for behavioral health services were reduced in the 1990s, and although rates for some services have been increased, many behavioral health services have yet to be adequately reimbursed. Public services have generally not been adequately funded to meet the needs presenting to the system.

Publicly funded mental health services for children in Rhode Island are provided by the state Department of Children, Youth, and Families (DCYF) through contracts with community-based organizations or through RIte Care. Mental health care for adults is provided by the state Department of Mental Health, Retardation, & Hospitals (MHRH) directly or through RIte Care. Low-income, uninsured individuals are dependent upon the state's community mental health system for services.

In 2006, the National Alliance on Mental Illness (NAMI) gave Rhode Island an overall grade of "C" with respect to its progress toward ensuring a proven, cost-effective mental health system, based on information from four information sources and scored from 39 specific criteria representing four categories: Infrastructure, Information Access, Services, and Recovery Supports. According to NAMI, Rhode Island's urgent mental health needs include: private sector provider rates and supply, alternatives to hospitalization, and Spanish language workforce development.

Dental insurance is not available to many working families in Rhode Island. Fewer than half (48%) of Rhode Island employers offer dental insurance to their full-time employees, and 14% offer it to there part-their employees. Despite this, the percentage of Rhode Islanders who had a dental visit within the past year was 78.5% in 2004, which ranked Rhode Island 4th highest among the 50 states. State law requires schools to provide dental screenings for all newly enrolled students, annually for children in grades K through 5, and at least once between grades 7-10.

In 2006, Medicaid reimbursement rates were raised for dental providers participating in the RIte Smiles Program. As a result, the number of dentists accepting qualifying children with Medical Assistance has more than tripled. Nearly half (49%) of children who were enrolled in RIte Care, Rite Share, or Medicaid fee-for-service during 2006 received a dental service during the year.

Fourteen percent (14%) of Rhode Island children under age 18 are estimated to have special health care needs. Currently, 23% of all households in Rhode Island have a child with at least one special health care need. A higher percentage of children in low-income families in Rhode Island have special health care needs compared to those in the United States, with 16% of Rhode Island children in families with incomes less than 200% of the federal poverty level reporting special health care needs, compared with 14% nationally.

Rhode Island is required under Part C of the federal Individuals with Disabilities Education Act (IDEA) to provide appropriate Early Intervention services to all children from birth to age three who are developmentally delayed or have been diagnosed with a physical or mental condition that has a high probability of resulting in developmental delay. Recent changes to the federal legislation requires sates to refer children who have been involved in a substantiated case of child abuse or neglect and children who have been affected by illegal substance abuse to EI for an eligibility assessment. In addition, Rhode Island's eligibility criteria include children who are at-risk of experiencing a substantial delay if early intervention services are not provided through a multiple established conditions category (very few states choose to provide services to at-risk children).

In Rhode Island in 2009, ten certified Early Intervention provider agencies served 3,795 children. Nearly two-thirds (63%) of children receiving Early Intervention services were male and just over one-third (37%) were female. Enrollment is nearly evenly distributed among children by age, with 31% ages birth to one year, 35% between ages one and two, 33% between ages two and three, and less than 1% over age three. Children living in Rhode Island's core cities were almost twice as likely to participate in Early Intervention based on multiple established conditions (10.4%) than children in the remainder of the state (6.1%).

In Rhode Island, local school systems are responsible for identifying and evaluating students ages 3-21 who they have a reason to believe are students with disabilities and therefore might require special education and related services through IDEA. Between school year 1990/1991 and school year 2005/2006, the percentage of students enrolled in special education increased by 49% in Rhode Island. In school year 2004/2005 (the most recent year national data were tabulated), Rhode Island had the highest percentage (20%) of public school students identified as disabled and receiving special education services under IDEA in the nation.

In Rhode Island during the 2008-2009 school year, 17% (24,302) of children enrolled in K-12 public schools received special education services. Forty-one percent (41%) of students receiving special education services in Rhode Island had a learning disability.

Children who meet certain disability criteria are eligible for Medicaid and/or cash assistance through the federal Supplemental Security Income (SSI) Program. In 2006, there were 5,175 Rhode Island children under age 21 receiving Medical Assistance benefits because of their enrollment in SSI. In Rhode Island, the Katie Beckett eligibility provision provides Medical Assistance coverage to certain children who have serious disabling conditions, in order to enable them to be cared for at home instead of an institution. In 2005, there were 1,562 Rhode Island children under age 21 enrolled in Medical Assistance because of eligibility through the Katie Beckett provision.

Childhood obesity continues to be a crisis in RI. 36 percent of our WIC children are overweight or obese, as are 40 percent of our 7th graders and 27 percent of our high school youth. The situation is worse in urban areas where the built environment and social and political influences make it hard for families to make healthy decisions. ARRA stimulus funds provide a unique opportunity for HEALTH to partner with non-traditional partners to address issues around community walkability, recreation, urban planning, zoning and access to affordable healthy foods. RI's tobacco control movement has successfully resulted in passage of smoke free work place laws and other legislation restricting the sale and promotion of unhealthy tobacco products. Lessons learned from these successes

are informing legislative and community mobilization strategies in RI to reverse the unhealthy trends in overweight and obesity.

Pandemic Influenza 2009/20010

The importance of a strong and sustainable infrastructure for maternal and child health was well demonstrated this past year with the pandemic flu outbreak. It can be noted that because of the infrastructure that has been built in and with Title V, our immunization rates for our children and pregnant women greatly surpassed our neighboring New England states. Per the BRFSS 2009-2010 we achieved an 85% rate of immunization for infants, children and young adults and a rate of 67% for our pregnant women.

State Title V Priorities

This past year was marked with unprecedented challenges that affected the Division of Community Family Health and Equity as well as the entire RI Department of Health, from programmatic issues, to budget constraints, workloads and job responsibilities that shifted associated with the worldwide H1N1 pandemic, ARRA funding to states and health reform passage. Daily contribution s and commitment of HEALTH staff was key in meeting the Department's priorities including: reducing health disparities and achieving health equity, addressing the epidemic of obesity and the creation of policies, social and built environments that makes adoption of healthful choices the easiest and preferred option. The Department's Division of Community, Family Health and Equity (DCFHE) supports these department-wide priorities as well as being the lead Division for Maternal and Child Health priorities.

The DCFHE has primary responsibility for assessing the health and developmental needs of young families and children in the state, for planning effective measures to address those needs, for evaluating programs and policies affecting the health and development of women, children, and families in the state and for implementing effective measures to address those needs. DCFHE's new approach to public health includes the four pillars of: equity, the social and environmental determinants of health, life course approach, and integration. When allocating resources and making decisions on what interventions should be implemented, CFHE uses the "Equity Pyramid" – adapted from Thomas Frieden, MD, MPH, presentation at the *Weight of the Nation Conference*, in Washington D.C., July 27, 2009- as a tool to help prioritize its work. The "Equity Pyramid" establishes 5 levels of program impact/effectiveness from Level 1 (less impact) at the top of the pyramid to level 5 (most impact) at the bottom at the pyramid. As you go up the pyramid the interventions impact the individual, but have less of an impact across the population.

Results from the statewide needs assessment, state and national performance measures, capacity indicators, and community stakeholders' input provide a comprehensive picture of the MCH needs in Rhode Island. From this combination of quantitative and qualitative information, the DCFHE identified state priorities and associated State Performance Measures. Together, the priorities represent each of the four levels of the MCH pyramid and all MCH population groups. The capacity to address significant public health challenges at several service levels in an integrated way is the special mandate of Title V and the DCFHE is proud of its coordinated, leveraged, and evaluated investments in community care for all children and their families in Rhode Island.

For FY2011, the DCFHE developed new priorities and State Performance Measures based on its comprehensive needs assessment and the community input received in FY2010. Table 11. reflects the MCH populations, needs assessment themes, State priorities and State performance measures. The new priorities and state performance measures for FY2011 areas follows:

Priority: Expand capacity and access to parent education and family support programs.
SPM1: Increase the number of RI resident families with at-risk newborns that receive a home visit during the newborn period (<=90 days).

Priority: Reduce tobacco initiation among middle school students.
SPM2: Reduce the percent of middle school students who have initiated tobacco use.

Priority: Increase the percentage of adolescents who have a preventive "well care" visit each year.
SPM3: Increase the percentage of adolescents who have a preventive "well care" visit each year.

Priority: Decrease the percentage of high school students with disabilities who report feeling sad or hopeless.
SPM4: Decrease the percentage of high school students with disabilities who report feeling sad or hopeless.

Priority: Increase the percentage of women who have a preventive care visit in the last year.
SPM 5: Increase the percentage of women who have a preventive care visit in the last year.

Priority: Initiate prenatal home visiting program.
SPM6: Initiate prenatal home visiting program; Number of pregnant women delivering babies served by home visiting program.

Priority Promote use of evidence based programs to support parents and families.
SPM7: Increase the number of parents with children in early childhood that enroll in parenting education/support programs.

Priority: Adopt the social determinants of health into public health practice.
SPM8: Decrease the number of Rhode Island adolescents who report food insecurity.
SPM9: Increase the number of Rhode Island high school students who earn a high school diploma or diploma equivalent in the six core cites.

All of the State performance measures are new with the exception of SPM 1. This measure is a modified version of former SPM 3. The modification reflects the current efforts in Rhode Island home visiting initiatives. State Performance Measures 2-6 mirror the identified priorities reflected in the themes based on data and community input. State Performance Measures 1, and 7 are related priorities based on a life course perspective for prioritizing health care needs and services by looking at health and wellness across the lifespan. The measures are for specific populations yet our intent and purpose is an overarching priority across all of the MCH population groups. State performance measures 8 and 9 are indicators of the social determinants of health. Most health disparities affect groups that are disadvantaged or marginalized because of their socioeconomic status, race/ethnicity, gender, sexual orientation, disability status, geographic location, or any combination of these. Access to healthy food and quality education are social determinants that contribute to good health.

**For additional information on the selection of State priority needs please see Section 4 (Part B) of the Rhode Island MCH application.*

Table 11. Maternal and Child Health State Needs Assessment Themes, State Priorities and State Performance Measures

Population	Themes	State Priority	State Performance Measure
Early Childhood	*Family support and involvement *Parent education *Data sharing *Oral health care *Prenatal Care *Employer supports (maternal depression, breastfeeding)	1. Expand capacity and access to parent education and family support programs	KIDSNET data Former SPM 3 revised to fit the new home visiting effort program including expanding access to community support systems for families in need of services Percent of RI resident families with at-risk newborns that receive a home visit within the newborn period (<= 90 days)
Middle Childhood	*Family support and involvement *Partnerships/integration with schools, communities and providers *Health and wellness *Mental health/bullying *Access to care *Transportation *Homeless youth *Oral health	2. Reduce tobacco initiation among middle school students	YRBS 2009- middle school students who ever tried cigarette smoking Percent of middle school students reporting smoking
Adolescence	*Family support and involvement *Access to care (physical and mental health, contraception) *Partnerships among youth serving state/community agencies *Health and Wellness *Transportation *Homelessness *LGBT *Teen dating violence/ bullying	3. Increase the percentage of adolescents who have a preventive "well care" visit each year	HEDIS 2008-preventive care visits, average among the RI health plans Number of adolescents receiving a preventive care visit enrolled in Medicaid or private health plans
Children with Special Health Care Needs	*Mental health *Access to care/medical home *Family support and involvement *Health and wellness *Partnerships among schools and communities specific to cshcn	4. Increase the social and emotional health of children and youth with special health care needs.	YRBS-2009 the number of high school students with disabilities who reported feelings of sadness/hopeless in the past 12 months Youth who answer yes to having a disability and feeling sad or hopeless

Women Across the Lifespan	*Access to preconception care *Health and wellness/obesity prevention *Preventive care/screening for chronic conditions	5. Increase the percentage of woman who have a preventive care visit in the past year	HEDIS 2008 preventive care visit among women 18 + years of age. Percent of RI women 18 + who report visiting a doctor for a routine check-up any time less than 12 months ago
Pregnant Women	*Access to prenatal care *Supportive networks for women and children *Prenatal home visiting	6. Initiate prenatal home visiting program	KIDSNET data Number of pregnant women delivering babies served by home visiting program
Overarching	*Health and wellness *Partnerships *Data systems *Access to care/medical home *Mental health *Family involvement and support *Use of evidence based approaches		
		7. Promote use of evidence-based programs to support parents and families (choose a population group)	State Program data-Early Childhood Program Number of parents enrolled in parenting program related to early childhood
		8. Adopt social determinants of health into public health practice (2 measures)	YRBS-2011 1) Food Insecurity Question Number of students who answered rarely, sometimes, most of the time or always to going hungry over the past 30 days RIDE data 2) Increase the number of students who earn a high school diploma or high school diploma equivalent in Rhode Island's core cities (cities with at least 20% of children living below the poverty line). Number of students who complete public high schools in the six core cities

6. Outcome Measures – Federal

The new State priorities (discussed above) and corresponding performance measures, along with the 18 National performance measures are designed to have a collective contributory positive impact on the six National outcomes measures including: perinatal mortality, infant mortality, neonatal mortality, postneonatal mortality, child mortality, and infant death disparity. The new State performance measures are shorter-term precursors for the National outcome measures. All six National outcomes measures focus on mortality among our most vulnerable populations yet, within the context of State and National performance measures, the necessity and breadth of a life course approach is evident to reach these goals. Also, DCFHE's commitment and emphasis to include efforts across both the MCH and health equity pyramids, demonstrates our promise to reduce disparities and achieve health equity for all Rhode Islanders.

**For additional information on this section please see Section 4 (Part A) of the Rhode Island MCH application.*

APPENDIX A:

Rhode Island Department of Health
Division of Community, Family Health and Equity

2010

RHODE ISLAND DEPARTMENT OF HEALTH

DIVISION OF COMMUNITY FAMILY HEALTH AND EQUITY

2010

RHODE ISLAND DEPARTMENT OF HEALTH

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Dear Friends,

The mission of the Department of Health (HEALTH) is to prevent disease and to protect and promote the health and safety of the people of Rhode Island. While we have a long history of leadership and excellence in responding to that mission, we also have changed as an organization. The Division of Community, Family Health and Equity (CFHE) is the result of a realignment of different divisions within HEALTH in order to achieve better synergy, coordination and integration of our programs.

CFHE's goal is to achieve health equity for all Rhode Islanders, through eliminating health disparities, assuring healthy child development, preventing and controlling disease, preventing disability, and working to make our environment healthy. CFHE uses a life course development approach that addresses the determinants of health as its framework for health planning. This booklet explains who we are, what we do, and our core values in reaching HEALTH's mission.

We recognize that social, political and economic policies, and conditions evolve and determine health outcomes. We must recognize that while we have made significant progress towards meeting some of the Healthy People 2010 goals, the same cannot be said of the overarching goal of eliminating health disparities. We are eager to work on the Healthy People 2020 goals with a new vigor and commitment to eliminating disparities while also introducing the challenge of achieving health equity.

HEALTH is comprised of public health professionals that work in partnership with you, each other, and with the citizens across the state. Collectively, we can help all Rhode Islanders achieve their optimal state of health.

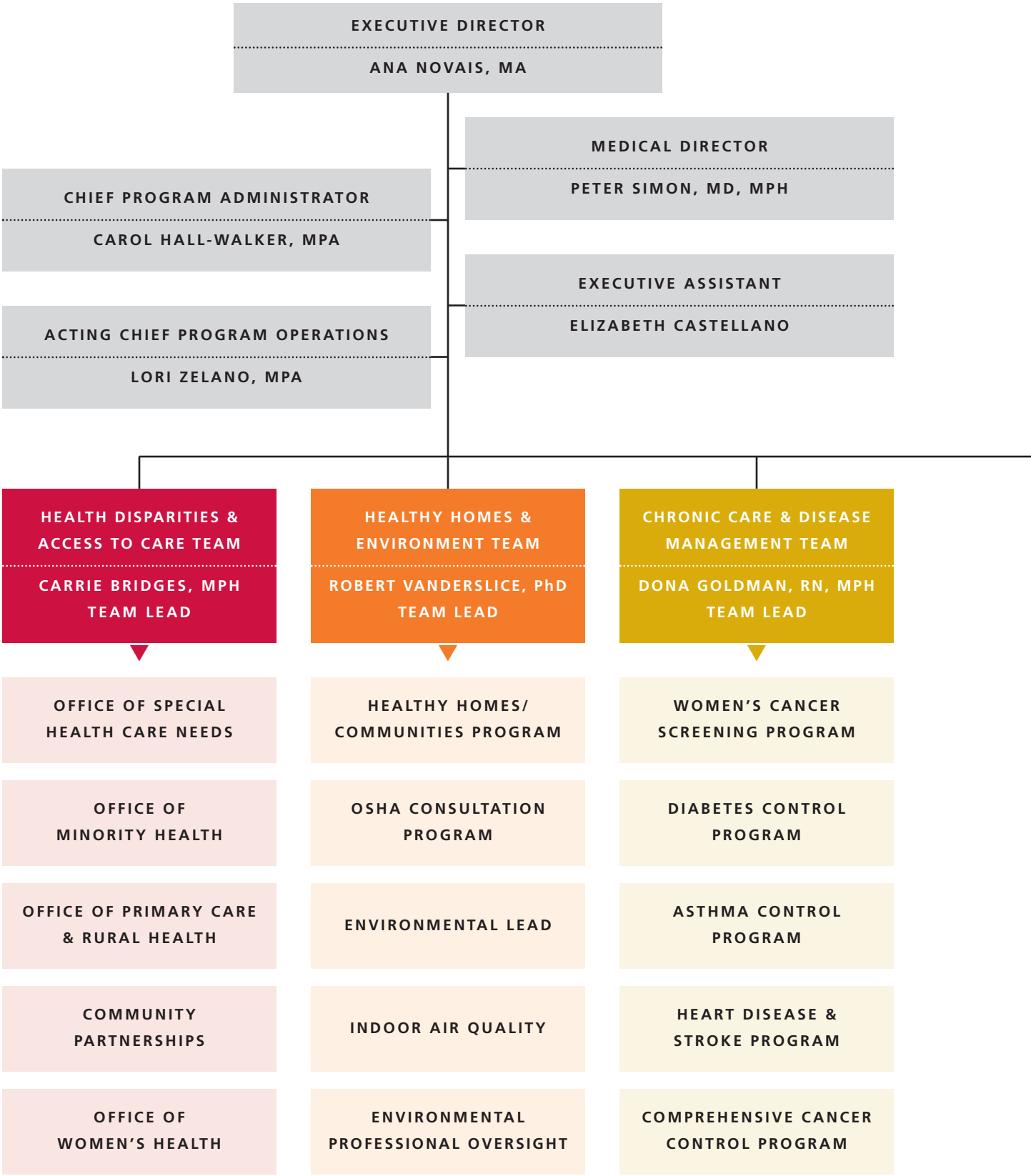
Please join us in making our state a healthier place to live, work, and play so that together we can make a difference in the health and lives of the people who live in all Rhode Island communities. We look forward to charting the future of public health in collaboration with you.

Sincerely,

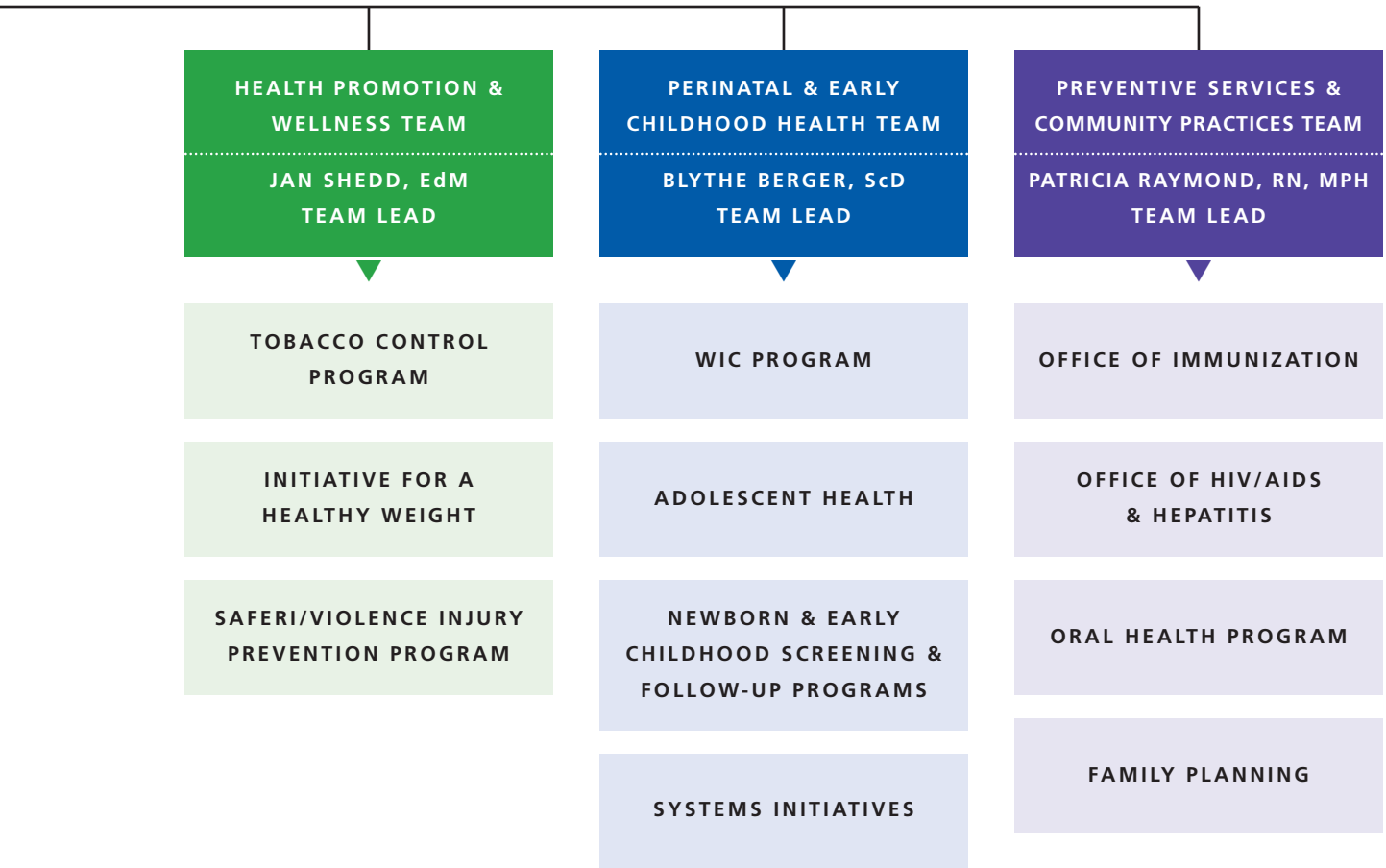
Ana P. Novais, MA
Executive Director of Health
Community, Family Health and Equity
Rhode Island Department of Health

RHODE ISLAND DEPARTMENT OF HEALTH

2 OVERVIEW OF ORGANIZATIONAL STRUCTURE



The Executive Director of the Division of Community, Family Health and Equity (CFHE), provides leadership, vision, communication and direction to the administrative staff, team leads, program leads, and support staff across all six teams. Proactive and applied public health strategies focus on all members of our community to eliminate health disparities throughout Rhode Island. As a division team, integration between public health programs, including social, political and economic policies that determine health outcomes, plays a key role in improving the lives of all Rhode Islanders. It is through this collective work effort that CFHE offers quality programs and continues to assure that all Rhode Islanders will achieve optimal health throughout the lifespan.



EXECUTIVE ADMINISTRATION TEAM

It is an honor to work with such dedicated public health professionals across the department and division. I look forward to our continued work together to achieve for all people healthy communities in a healthier state. ~ Carol Hall-Walker

« CAROL HALL-WALKER, MPA, CHIEF PROGRAM ADMINISTRATOR

All six teams in the Community, Family Health and Equity Division have been faced with unprecedented program challenges during these tough economic times. Workloads and job responsibilities have shifted due to the time constraints associated with the worldwide H1N1 pandemic. Through it all, it remains apparent by the daily contributions and commitment demonstrated by diverse team members across the division, that strong community and family health values start here. It is through this dedication and hard work, consistently demonstrated at the Rhode Island Department of Health, that we forge ahead in collaboration across all departments and teams to meet our division goals and expectations. In 2010 and beyond, we will continue to provide quality programs so that all Rhode Islanders live in healthy communities and in a healthier state.

As the Preventive Health and Health Services Block Grant Coordinator, and Region I Representative, the PHHS funding gives us the flexibility to prioritize the use of these funds to fill funding gaps in programs that deal with leading causes of death and disability, as well as the ability to respond rapidly to emerging health issues. The PHHS Block Grant funds affords us the opportunity to address many public health needs and challenges in innovative and locally defined ways.

The PHHS Block Grant, and all of the public health work we do within CFHE, is making a difference in the lives of the people in Rhode Island. I look forward to another year of working side by side with all of you to continue our journey together in improving the health and lives of all citizens in our state.

Carol Hall-Walker

Carol Hall-Walker, MPA
Chief Program Administrator

The connection between health and dwelling is one of the most important that exists. ~ Florence Nightingale

« PETER SIMON, MD, MPH, MEDICAL DIRECTOR

All Rhode Islanders deserve to live in safe, well-lit, unpolluted communities. Healthy homes, with nearby, open, green, recreational areas, where children and their families can exercise and play, are essential and should be easily accessible and protected in all neighborhoods. I envision healthy Rhode Island neighborhoods that consist of a library, an excellent public school system, job training facilities, affordable food markets, and farmer's markets filled with fresh, local produce. Once this environment is created within our communities, residents will begin to feel more pride in their surroundings and expect respect from others in maintaining and policing their own healthy living areas. An increase in the level of pride that is felt within the community surroundings creates an environment that will support growth, development, and learning throughout the human life-course. Many communities in our state are desperately in need of TLC. The investment we make in improving the assets of these, and other, communities throughout Rhode Island is an investment in creating higher living standards, healthier communities, and eliminating health disparities.

Peter Simon, MD, MPH
Medical Director

When health is absent, wisdom cannot reveal itself, art cannot manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied. ~Herophilus

« LORI ZELANO, MPA, ACTING CHIEF PROGRAM OPERATIONS

My role as Operations Administrator in CFHE is to work with the Executive Director and Division staff to assist with the proper receipt and disbursement of departmental funds (including those that are privately, federally, and state financed) within the state's budget and procurement system and to assure that the investments (contracts and purchases) are efficiently utilized to achieve Program goals and objectives. Operations functions include: state budget development; budget reporting; forecasting and analyzing budget information; monitoring of accounts within state procurement system – RIFANS; contract and purchasing; as well as administrative division policies and procedures related to operations.

The Operations Unit manages the MCH block grant budget and guides the process of assuring that funded MCH grant projects are aligned with the MCH priorities. The Title V Maternal and Child Health Block Grant uses a life course development approach in addressing the social determinants of health as a framework for health planning. Title V also assures that the needs of families and children in RI are met by focusing on the following areas in response to a comprehensive needs assessment:
1) Improve maternal health; 2) Promote healthy lifestyles and healthy weight; 3) Engage and empower parents; 4) Support safe and healthy environments for families; 5) Address social, emotional, and behavioral health needs; 6) Improve pregnancy outcomes; 7) Assure all Rhode Island families have a medical home; 8) Promote healthy development in children, adolescents and families; 9) Build a connected community system of services for children with special needs and their families.

Lori Zelano

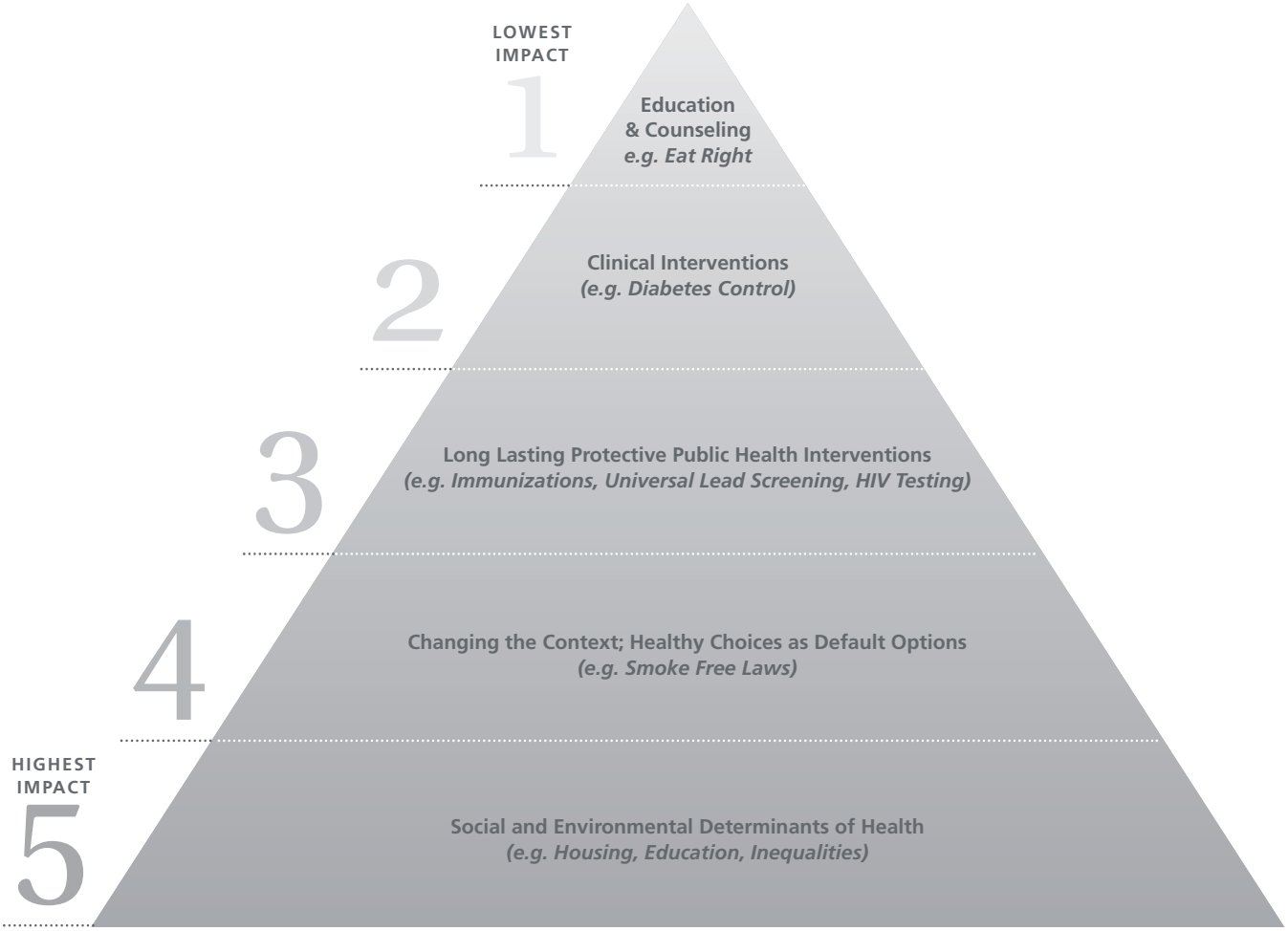
Lori Zelano, MPA
Acting Chief, Program Operations

EQUITY FRAMEWORK: PRIORITIES

Equity, the social and environmental determinants of health, life course approach, and integration of programs are the four pillars of the CFHE's new approach to Public Health. When allocating resources and making decisions on what interventions should be implemented, CFHE uses the following tool to help prioritize its work.

The example below uses the the Initiative for a Healthy Weight Program:

1. **Education and Counseling:** (targeting individual behaviors), e.g., encourage eating five servings of fruits and vegetables each day.
2. **Clinical Interventions:** e.g., outreach to medical providers to counsel their patients about diet.
3. **Long-lasting Protective Public Health Approach:** e.g., screening/collecting BMI for all kids at school.
4. **Changing the Context; Making the Healthy Choices by Default:** e.g., offering juice, not soda, in vending machines.
5. **Social and Environmental Determinants of Health:** e.g., ensuring access to affordable, healthy foods in neighborhoods affected by poverty.



This pyramid is adapted from Thomas Frieden, MD, MPH, presentation at the *Weight of the Nation conference*, in Washington D.C., July 27, 2009

WHO WE ARE

CFHE works to eliminate health disparities by assuring healthy child development, and preventing and controlling disease and disability.

CFHE uses a life course development approach and addresses the determinants of health as a framework for health planning.

CFHE recognizes that social, political, and economic policies and conditions determine health outcomes.

CFHE values the community as a core partner in public health and works to assure that equity in health is a reality.

CFHE plans, develops, and evaluates programs and systems of care, which are comprehensive, community-based, culturally competent, coordinated, and effective.

WHAT WE DO

CFHE's six teams represent priority areas that promote synergy, collaboration, integration and coordination among programs:

Health Disparities and Access to Care Team assures equitable systems, empowers communities, and builds capacity to promote access to comprehensive, high quality services that are responsive to the needs of Rhode Island's diverse populations so they may achieve their optimal state of health.

Healthy Homes and Environment Team protects the health and safety of children, workers, and the general public by identifying and decreasing environmental hazards.

Chronic Care and Disease Management Team uses a systems approach to reduce the incidence, burden, and associated risk factors related to diabetes, asthma, cancer, heart disease, and stroke to improve health outcomes.

Health Promotion and Wellness Team is committed to promoting the health and well-being of all Rhode Islanders by changing social, political, and physical environments to support healthy lifestyles. We focus on obesity prevention, tobacco control, and violence and injury prevention.

Perinatal and Early Childhood Health Team supports healthy birth outcomes, positive early childhood development and school readiness, and preparation for healthy productive adulthood by providing and assuring mothers, children, and adolescents access to quality maternal and child health services.

Preventive Services and Community Practices Team improves the quality of preventive care and community services through immunization, oral health, family planning services, and HIV/AIDS and Viral Hepatitis programs. This is achieved by increasing access and availability to vulnerable populations by diminishing ethnic/racial health disparities, providing performance standards, enhancing community partnerships, and applying evidence based, effective programming.

OUR CORE VALUES

1. We respect and embrace the diversity of our staff and the communities we serve.
2. We value community involvement and participation at all levels.
3. We are committed to eliminating racial and ethnic health disparities.
4. We believe in health equity and social justice.
5. We value teamwork and the unique skills and contributions of each team member.
6. We value integrative work both within and between teams.
7. We recognize the value of ongoing professional development for all levels of staff.
8. We believe in open, two-way communication at all levels of the organization.
9. We make decisions based on our values and science-based research.
10. We are accountable to each other and to our communities.

HEALTH DISPARITIES AND ACCESS TO CARE TEAM

Assure equitable systems, empower communities, and build capacity to promote access to comprehensive, high quality services that are responsive to the needs of Rhode Island's diverse populations so that they may achieve their optimal state of health.

« CARRIE BRIDGES, MPH, TEAM LEAD

Health Disparities and Access to Care Team :: Carrie Bridges, MPH, Team Lead, 401.222.4655

Office of Special Health Care Needs :: Deborah Garneau, MA, Chief, Deputy Team Lead, 401.222.5929

Office of Minority Health :: Rilwan Feyisitan Jr., Chief, 401.222.5940

Office of Primary Care and Rural Health :: Carla Lundquist, Acting Chief, 401.222.7626

Community Partnerships :: Mia Patriarca-O'Flaherty, MA, Coordinator, 401.222.5984

Office of Women's Health :: Carrie Bridges, MPH, 401.222.4655

REFUGEE HEALTH

The Refugee Health program works to ensure that refugees and asylees enter into a comprehensive system of care that adequately responds to their unique health care needs by addressing the coordination of care, surveillance, epidemiology, education, and training. This program convenes partners to identify and resolve system barriers to appropriate care for refugees. Trained providers initiate a comprehensive health assessment within 30 days of arrival. The Refugee Health Program works in conjunction with the Refugee Resettlement Agencies and has a large network of partners.

2009 Accomplishments and Milestones

» 90% of refugee children were screened for dental services within two months of arrival.
» 85% of medical providers in the refugee health network were trained on health screening protocols and procedures.
» The Refugee Health Program assisted 202 refugee adults with the medical screening requirements for the adjustment of status process.

MINORITY HEALTH PROMOTION PROGRAM

The Minority Health Promotion Program works to eliminate racial and ethnic health disparities to assure that racial and ethnic minority populations have equal access to high quality health services. The program's activities focus on health system enhancements and programming related to disease prevention, health promotion, service delivery, and monitoring the health status of racial and ethnic minority populations. Funded community-based organizations address the Department of Health's priorities of reducing disparities and eliminating childhood obesity by providing health promotion, disease prevention, and referral services to the community.

2009 Accomplishments and Milestones

» During the last 3 year funding cycle, more than 10,000 first time clients and almost 20,000 returning clients were served through the Minority Health Promotion Centers (MHPC).
» MHPC Coordinators achieved an 83.75% completion rate on client referrals.

HEALTHY RI AND CLAS INITIATIVES

Healthy Rhode Island is a guide to public health improvement efforts in Rhode Island. The Healthy RI 2010 plan tracks progress toward 27 objectives to reach the overarching goals to eliminate health disparities and increase the quality and years of healthy life. The Healthy RI 2020 initiative will similarly identify statewide objectives aligned with national goals to reduce disparities and achieve health equity. A primary strategy to improve quality and eliminate disparities among Rhode Islanders is reflected in the departmental emphasis on cultural competence and language access through the implementation of the federal Culturally and Linguistically Appropriate Services (CLAS) mandates.

2009 Accomplishments and Milestones

» Supported statewide community-based organizations in changing the built environment to promote health by organizing Paths to Health across the state.
» Published tools including disparities data and guidance on best and promising practices to assist health partners in achieving healthy people objectives.
» Tracked progress on healthy people objectives for race and ethnic minorities and persons with disabilities.
» Offered language access and cultural competency trainings to hospitals, home health agencies, community-based organizations, and HEALTH Staff.

FAMILY/PEER RESOURCE SPECIALIST PROGRAM

The Family and Peer Resource Specialist Program brings the perspective of parents, youth, and consumers into policy development and medical home implementation. Resource Specialists strengthen CFHE's capacity to deliver effective services, to address critical health issues, and to involve the community in the discussion that leads to effective program planning for the State's disabled and culturally diverse populations. In addition, the program assists consumers in accessing community resources such as specialty care, independent living, education, employment, and vocational training.

2009 Accomplishments and Milestones

» Nearly 200 primary care and specialty care providers accessed a Peer/Family Resource Specialist.
» 87% of families reported that their child's health services are always or usually easy to use.

PEDIATRIC SPECIALTY SERVICES

Pediatric Specialty Services works to provide medical home enhancement for children and youth with special healthcare needs including children and youth with Autism Spectrum Disorder. The Pediatric Practice Enhancement Project (PPEP) ensures a coordinated system of care for children and youth with special needs, and their families, by placing trained Parent Consultants in pediatric primary and specialty care practices to assist families in accessing community resources, to assist physicians and families in accessing specialty services, and to identify barriers to coordinated care.

2009 Accomplishments and Milestones

» 24 pediatric and specialty care clinics hosted a Parent Consultant.
» Annual healthcare costs were lowered by 15% for PPEP participants.
» PPEP was accepted as a Promising Practice in the field of Maternal and Child Health by the Association of Maternal and Child Health Programs and written up as a case study by the Robert Wood Johnson Foundation.

DISABILITY AND HEALTH PROGRAM

The Disability and Health Program promotes health, wellness, and emergency preparedness for people with disabilities through surveillance, professional development opportunities and community initiatives. The program maintains a Special Needs Emergency Registry for people with special needs, chronic conditions and disabilities in the event of an emergency. The Program also maintains a Traumatic Brain Injury (TBI) Registry and linkage program.

2009 Accomplishments and Milestones

» Connected over 4,000 Rhode Islanders with special needs to the Special Needs Emergency Registry and provided them with information on emergency preparedness.
» Built a data system to monitor traumatic brain incidents in RI and documented 400% more TBIs than the existing national estimate.

ADOLESCENT TRANSITION

The Office of Special Healthcare Needs is responsible for assisting youth with chronic health conditions and disabilities to transition to the adult systems of primary and specialty care, education, employment, and insurance. The Adolescent Healthcare Transition program makes resources available for physicians, parents, and youth regarding the timeline and necessary components of transition that support self-determination.

2009 Accomplishments and Milestones

» 400 Rhode Island youth attended the Dare to Dream – Student Leadership Conference.
» Transition toolkits were published for adolescents/youth, families, and providers that outline practical steps, milestones, and reasonable timelines for transitions.

HEALTHY COMMUNITIES

Healthy Communities is a new initiative designed to reduce health disparities and improve access to care by providing communities with the information, skills, and resources they need to improve preventive health systems. Healthy Communities strives to create more effective connections between local initiatives and statewide policy development. Available resources include: technical assistance, training, best practice information, data, and performance measurement.

2009 Accomplishments and Milestones

» Received funding to pilot an integrated model of community-based chronic disease prevention through a state and community partnership.

WOMEN'S HEALTH

The Office of Women's Health (OWH) works to eliminate health status disparities for Rhode Island women. This is achieved by promoting a gender-informed, coordinated, comprehensive, prevention focused approach to women's health across the lifespan. The OWH helps to coordinate internal and external efforts to use policy change to improve the health of women, increase public awareness of issues impacting the health of women, and to promote healthy behaviors and environments in partnership with other programs and organizations.

2009 Accomplishments and Milestones

» Organized annual women's health conference for service providers and the women of RI that focuses on improving access to and quality of services.

» Linked Department of Health resources with external health and policy partners to improve the statewide coordination of women's health investments.

PRIMARY CARE AND RURAL HEALTH

The Office of Primary Care and Rural Health (OPCRH) focuses on increasing access to high-quality, comprehensive, coordinated, culturally appropriate care for underserved Rhode Islanders through needs assessment, promotion of the health care safety net, workforce development, collaboration with health system stakeholders, and community capacity-building. The Primary Care Office is responsible for assessing primary care, psychiatric, and oral health care capacities in the state, delineating geographic and specialty specific shortages, seeking and maintaining federal shortage designations, and developing plans to address those shortages. Similarly, the State Office of Rural Health grant strengthens rural/non-metro health care delivery systems. The OPCRH is the primary state contact for the National Health Service Corps and works with state and federal partners to strengthen the recruitment and retention of qualified health professionals serving low-income, uninsured, and underinsured populations. Also, the OPCRH staffs the Primary Care Physician Advisory Committee (PCPAC), which provides recommendations to the Department of Health on medical and policy matters impacting the quality and distribution of primary care services statewide.

2009 Accomplishments and Milestones

» Seven communities in RI, including five of the six core cities, have federal designations as primary care Health Professional Shortage Areas (HPSA) in addition to the 11 automatically designated Federally Qualified Health Centers. Six communities have dental HPSA designations and four communities have mental health HPSA designations.

» Established the RI Rural Health Steering Committee to assess and address health and social service needs of non-metropolitan areas of the state.

» Selected as one of six National Academy of State Health Policy 2009-2010 State Primary Care Teams, in collaboration with the RI Health Center Association and the Office of the Health Insurance Commissioner.

HOSPITAL CHARITY CARE

State regulations codify the long-standing tradition of non-profit hospitals providing free or discounted care to the uninsured poor. This unit educates health care providers and patients, reviews hospital compliance with regulations, and identifies opportunities for improvement in order to maximize utility of this invaluable community resource.

2009 Accomplishments and Milestones

» Authored patient and provider educational materials and provided in-service education and consultation at Community Health Centers and other sites.

» Investigated and helped resolve patient and hospital complaints about the provision of charity care.

HEALTHY HOMES AND ENVIRONMENT TEAM

Protect the health and safety of children, workers, and the general public by identifying and decreasing environmental hazards.

« ROBERT VANDERSLICE, PhD, TEAM LEAD

Healthy Homes and Environment Team :: Robert Vanderslice, PhD, Team Lead, 401.222.7766

Healthy Homes Programs :: Magaly Angeloni, Deputy to Team Lead, 401.222.7741

OSHA Consultation Program :: James Bruckshaw, Manager, 401.222.7745

Childhood Lead Poisoning Prevention Program :: Magaly Angeloni, Manager, 401.222.7741

Indoor Air Quality :: David Spink, Manager, 401.222.7756

Environmental Professional Oversight :: Rosemary Sheets, Manager, 401.222.7784

Operations :: Anne Primeau-Faubert, Manager, 401.222.7747

INDOOR AIR QUALITY: ASBESTOS CONTROL PROGRAM

The Indoor Air Quality: Asbestos Control Program works to protect the Rhode Island public from exposures to carcinogenic airborne asbestos through hazard assessment and abatement of asbestos containing building materials by licensed professionals following safe work practices. The program is responsible for implementing the provisions of the Rhode Island Rules and Regulations for Asbestos Control. Provisions include: requirements for identifying and abating asbestos hazards in schools and other regulated buildings; procedures to ensure that abatement activities are performed in a safe manner; licensing and certification of asbestos professionals (including training providers), analytical labs, consultants, contractors, site supervisors, workers and others. Other program activities include prioritizing inspections of schools located in Environmental Justice Areas as defined by Environmental Protection Agency; conducting audits of certified training providers; technical review of asbestos abatement/management plans; and conducting outreach activities.

2009 Accomplishments and Milestones

» Reviewed 100% of the 900 asbestos abatement plans submitted by companies involved in asbestos removal.

CHILDHOOD LEAD POISONING PREVENTION PROGRAM

Childhood Lead Poisoning Prevention Program works to support statewide screening efforts; engage key housing-related interest groups in efforts to eliminate childhood lead poisoning; utilize strategic partnerships to target high-risk children and neighborhoods; and to evaluate the impact of primary and secondary prevention efforts.

2009 Accomplishments and Milestones

» Only 330 children had a blood lead level >=10 mcg/dL, compared to 1,161 children in 2003.

HEALTHY HOUSING PILOT

The goal of the Healthy Housing Pilot is to utilize new funding recently received from the Centers for Disease Control and Prevention (CDC) to build strategic alliances for healthy housing. These alliances will be formed with local partners and landlords to promote the value of certifying units as "lead safe" or "smoke free" and use the web-based searchable site HomeLocatorRI.net as a marketing tool for the public to search for healthy units available for rent. A Healthy Housing Collaborative Subcommittee works to engage and encourage landlords to use the HomeLocatorRI.net to promote their rental units with healthy housing characteristics and make them available to families in need.

2009 Accomplishments and Milestones

» Awarded one of only five CDC grants nationwide to conduct healthy housing pilots in Rhode Island.

ENVIRONMENTAL PROFESSIONAL OVERSIGHT

Environmental Professional Oversight works to meet all U.S. Environmental Protection Agency (EPA) requirements for training; licensure and certification of environmental professionals; and to take appropriate compliance or enforcement actions when professionals fail to meet regulatory requirements.

2009 Accomplishments and Milestones

» Increased the number of licensed Remodeler/Renovators to over 900 individuals, as mandated by the Environmental Protection Agency (EPA).

OSHA 21(D) CONSULTATION PROGRAM

The OSHA 21(d) Consultation Program provides safety and health consultation services to promote the safety and health of Rhode Island's working men and women in small to medium size private businesses (less than 250 employees) by identifying hazards and ensuring their timely abatement. Workplace safety and health is provided stressing the continued monitoring of conditions and improvement in workplace safety and health. All evaluations are done to provide employers with a resource and expert evaluation to comply with current workplace safety regulations in a confidential, preventive, and proactive approach. Employers who maintain injury and illness rates below their peers nationally, and have complied with all OSHA consultation recommendations, are recognized in the rigorous Safety and Health Achievement Recognition Program ("SHARP").

2009 Accomplishments and Milestones

» Increased the number of employers in the National Safety and Health Achievement Recognition Program ("SHARP") from five employers to eight.

INDOOR AIR QUALITY: RADON CONTROL PROGRAM

The Indoor Air Quality: Radon Control Program works to protect Rhode Islanders from lung cancer due to radon exposure by ensuring that no homes, schools, or other high priority public buildings have unacceptable radon levels.

2009 Accomplishments and Milestones

» Since 1994 increased the mitigated (reduced levels of radon) homes with unacceptable radon levels from 40% to 87%.

CHRONIC CARE AND DISEASE MANAGEMENT TEAM

Reduce the incidence, burden, and associated risk factors related to asthma, heart disease and stroke, diabetes, and cancer, to improve health outcomes.

« DONA GOLDMAN, RN, MPH, TEAM LEAD

Chronic Care and Disease Management Team :: Dona Goldman, RN, MPH, Team Lead, 401.222.6957

Women's Cancer Screening Program :: Brenda DiPaolo, BS, Manager, 401.222.1161

Asthma Control Program :: Nancy Sutton, MS, RD, LDN, Deputy Team Lead, 401.222.4040

Diabetes Prevention and Control Program :: Marilyn Gurney Moy, RN, BSN, MSW, Manager, 401.222.5116

Heart Disease and Stroke Prevention Program :: Patricia Affleck, MS, Manager, 401.222.3667

Comprehensive Cancer Control Program :: Sue Shepardson, SS, Manager, 401.222.7621

ASTHMA CONTROL PROGRAM

The Asthma Control Program works to provide leadership to improve health outcomes of all Rhode Islanders with asthma. Work includes increasing access to quality health care, asthma education, community resources, and services. In addition, the program addresses environmental determinants advocating for healthy environments where people with asthma live, work, learn, and play. The Asthma State Plan addresses all persons with asthma regardless of age, race/ethnicity, gender, socioeconomic status, or geographic area. Specific target populations include: people of low income, Hispanic adults and children, black non-Hispanic adults and children, women 65 years and older, Medicaid and Medicare recipients, and low income children and adults residing in the core cities (with a special focus on the City of Providence). These target groups were chosen based on current data in order to reduce disparities among populations disproportionately affected by asthma.

2009 Accomplishments and Milestones

» Funded eleven Rhode Island Chronic Care Collaborative Health Centers to improve the quality of asthma care provided to 1,400 asthma patients.

» Reached 211 Newport Housing Authority residents through the Healthy Residents, Healthy Homes asthma project, resulting in a reduction in the use of asthma relief medication and an improvement in asthma control.

» Rhode Island was selected as one of six states for the Asthma and Allergy Foundation of America's (AAFA) 2009 State Honor Roll as a state with exemplary statewide school policies that promote asthma and allergy management and prevention for students.

HEART DISEASE AND STROKE PREVENTION PROGRAM

The Heart Disease and Stroke Prevention (HDSP) Program works to eliminate disease by addressing system changes including behavior change and enhancing access to care. Priority areas include increasing control of high blood pressure (HBP), high blood cholesterol (HBC), and increasing knowledge of signs and symptoms of heart attack and stroke. Additional priorities include improving emergency response and the quality of heart disease and stroke care. In 2008, the HDSP Program applied for and received additional three year funding for a Cardiovascular Optional Program. The proposal was based on replicating the success in using the RI Chronic Care Collaborative (RICCC) to create system change in healthcare settings by integrating cardiovascular care into the existing RICCC.

2009 Accomplishments and Milestones

» Rhode Island has met Healthy People 2010 objectives for age-adjusted deaths from stroke.

» Funded four Rhode Island Chronic Care Collaborative (RICCC) health centers and one hospital clinic to improve the quality of cardiovascular care for 2,061 patients.

DIABETES PREVENTION AND CONTROL PROGRAM

The Diabetes Prevention and Control Program (DPCP) works to address the burden of diabetes in the state through coordination of the Rhode Island Statewide Diabetes Health System (RI-SDHS). The RI-SDHS is comprised of over seven hundred agencies and individuals. The goal of the DPCP is to target and control diabetes and prevent diabetes-related complications. The DPCP adopts, implements, evaluates, and institutionalizes individual programmatic elements based on the most recent guidelines for clinical and community preventive diabetes services. These programmatic elements work together synergistically and on multiple levels (i.e., individual, health system, environmental, community, state) to constitute a comprehensive systems approach to diabetes prevention and control. DPCP projects and activities are directed at quality diabetes clinical care, workforce development, multicultural programs, diabetes patient self-management, education, and pre-diabetes care.

2009 Accomplishments and Milestones

» 17% increase (51.4%) in the percent of adults in the RI Chronic Care Collaborative registry that have documented diabetes self-management goals.

» Increased DPCP workforce to 212 Certified Diabetes Outpatient Educators and 94 Master Trainers and Leaders for Living Well RI (Diabetes), the evidenced-based Stanford Chronic Disease Management Program.

» Trained 26 physicians as part of the RICCC Collaborative on the Planned Care and Improvement Model and diabetes standards of care with marked improvements in blood pressure, lipid, and A1c

» Statewide implementation of new school regulations for Glucagon administration for children with diabetes following passage of the 2008 law.

COMPREHENSIVE CANCER CONTROL (CCC)

Comprehensive Cancer Control (CCC) works to reduce the burden of cancer in Rhode Island through the development, implementation, and maintenance of a diverse statewide coalition representing a broad base of cancer interests including medical professionals, hospitals, public health, business, government, community-based organizations, advocates, foundations, physical and other specialty therapists, spiritual leaders, minority communities, and cancer survivors. This coalition, with over 125 members, is actively engaged in implementing the 2007 - 2012 State Plan to Reduce Cancer in RI through workgroups. The Plan's primary goals and objectives are: prevention, detection and screening, treatment, survivorship, surveillance and evaluation, and palliative care. The overarching goal of the plan is to eliminate disparities in all these areas. The CCC Colorectal Screening Improvement Project works directly with the RI Chronic Care Collaborative (RICCC) and its participating Community Health Centers (CHC). Success is achieved by training CHC teams in colorectal cancer, endoscopic (colonoscopy) screening, fecal occult blood tests, and patient history taking. Patient follow-up, self-management, and navigation are learned through collaborative trainings in 'teaching for screening' and motivational interviewing.

2009 Accomplishments and Milestones

» Funded seven Rhode Island Chronic Care Collaborative (RICCC) Health Centers to improve the quality of colorectal screening rates with a total of 203 referrals for colonoscopies.
» Worked with a group of community-based gastroenterologists to form Project SCUP (Screening Colonoscopies for Underserved Persons) and donated 37 free colonoscopies (5 patients per month/practice) resulting in 3 diagnoses.

WOMEN'S CANCER SCREENING PROGRAM

The Women's Cancer Screening Program (WCSP) works to reduce the burden (mortality and morbidity), of breast and cervical cancer, among low income women with special emphasis on reaching un/underinsured, older, medically under-served, racial, ethnic, and/or cultural minorities, including American Indians, Alaska Natives, African-Americans, Hispanics/Latinos, Asian Americans, lesbians, women with disabilities, and other emergent populations in RI (specifically the refugee population). The WCSP has developed a strong network of providers to assure that the delivery of breast and cervical cancer screening, follow-up, treatment, and support services are available for enrolled clients.

2009 Accomplishments and Milestones

» Administered 2,130 Mammograms and 3,036 Pap Smears.
» Enrolled 1,438 women into Medicaid to cover the cost of treatment for the diagnosis of a precancerous condition of the breast or cervix or a diagnosis of breast or cervical cancer.
» Over the life of the program more than 23,000 women have been enrolled in the WCSP.

HEALTH PROMOTION AND WELLNESS TEAM

The Health Promotion and Wellness Team changes social, political, and physical environments to support healthy living through the life course, and is committed to achieving health equity for all Rhode Islanders.

« JAN SHEDD, EdM, TEAM LEAD

Health Promotion and Wellness Team :: Jan Shedd, EdM, Team Lead, 401.222.4872

Tobacco Control Program :: Seema Dixit, MS, MPH, Manager, Deputy Team Lead, 401.222.7463

Initiative for a Healthy Weight :: Eliza Lawson, MPH, Manager, 401.222.4847

SafeRI/Violence and Injury Prevention Program :: Beatriz Perez, MPH, Manager, 401.222.7627

TOBACCO CONTROL PROGRAM

The Tobacco Control Program (TCP) works to create changes in social, political, and physical environments to make it harder for people to start using, and to continue using, tobacco. The program provides services that will help smokers quit, and uses multiple strategies to reduce smoking and exposure to secondhand smoke. Positive changes have been realized by collecting and sharing information and data with advocates (Tobacco Control Network), and by supporting passage of legislation that will serve as the catalyst in restricting sales to minors and raising excise taxes on tobacco products. Environments will become healthier places to live and work by enforcing smokefree laws, and eliminating smoking in workplaces and multi-unit dwellings. TCP also works to require health insurance coverage of cessation services, provide quit smoking services for the uninsured, and implementing counter-marketing campaigns to counter tobacco industry adversting and promotions and to reinforce the “no-smoking” message.

2009 Accomplishments and Milestones

» Reduced tobacco use prevalence below the national average of 20% to 17% for adults and 20% to below 15% for youth.
» Rhode Island has the highest state cigarette tax ($3.46 per pack) in the nation.
» Passed the private insurance mandate to cover cessation services and state Medicaid coverage of recommended cessation medications.

INITIATIVE FOR A HEALTHY WEIGHT

The Initiative for a Healthy Weight (IHW) is a leader in preventing and controlling obesity. The program changes social, political, and physical environments to make the healthy choice the easy choice for all Rhode Islanders. IHW leads the state in developing an annual policy agenda and building a strong network of advocates; improving community walk-ability; safety; access to recreation; access to healthy foods; ensuring that restaurants provide calorie information at the point of purchase; and strengthening nutrition guidelines for childcare providers. The program works to increase participation in best practice nutrition and physical activity programs, ensuring obesity prevention integration into routine primary care, and improving wellness policies and programming.

2009 Accomplishments and Milestones

» Increased residents' access to affordable fruits and vegetables in four new stores.
» Launched the "Fresh to You" mobile produce market in sixteen worksites and three communities.
» Provided toolkits to 1,540 Rhode Island physicians to help them address nutrition and physical activity issues with their patients.

SAFERI-VIOLENCE AND INJURY PREVENTION PROGRAM

The SafeRI-Violence and Injury Prevention Program gives communities and policy-makers the data and technical assistance they need to provide effective Injury Prevention programs and to implement policies. It also helps secure federal funds to address key safety issues. Injury prevention programs in schools provide students with the skills they need to sustain healthy relationships and to prevent violence and rape. It funds agencies to provide training to adults in school and community settings so they can identify youth who may be at risk of injuring themselves, or others, and getting them the professional help they may need to prevent suicide and other types of violence. SafeRI programs provide data and technical assistance on fall-related injuries to professionals working with older adults. Data and research information are provided to key decision makers about the effectiveness of a primary seat belt law, enforcing laws that stop Driving Under the Influence (DUI) and on other related issues that will save lives. SafeRI works with, the Department of Transportation (DOT), and community groups, to get bicycle helmets to children who wouldn't otherwise have them. Special emphasis is given to policies and funding that help to make neighborhoods safer for walking or biking to school allowing children to get more exercise and experience fewer injuries within their communities.

2009 Accomplishments and Milestones

» Reduced the percentage of high school students who indicated ever being physically forced to have sexual intercourse when they did not want to from 10% in 2007 to 7% in 2009 (Youth Risk Behavior Survey).
» Reduced the percent of African-American students who indicated ever being physically forced to have sexual intercourse when they did not want to from 10% in 2007 to 5.6% in 2009 (YRBS).
» Trained 3,729 middle and high school students to prevent sexual violence in 20 RI schools and community-based organizations.
» Effectively advocated for stronger drunk driving laws with a diverse group of community partners.

PERINATAL AND EARLY CHILDHOOD HEALTH TEAM

Support healthy birth outcomes, positive early childhood development and school readiness in preparation for a healthy, productive adulthood by providing and assuring mothers and children access to quality maternal and child health services.

« BLYTHE BERGER, ScD, TEAM LEAD

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Adolescent Health :: Rosemary Reilly Chammat, EdD, Manager, 401.222.5922

Newborn and Early Childhood Screening, Follow-up Programs :: Kristine Campagna, RN, Manager, 401.222.5927

Systems Initiatives :: Blythe Berger, ScD, Team Lead, 401.222.5949

WOMEN, INFANTS, AND CHILDREN (WIC)

WIC's primary mission, as an adjunct to good healthcare, is to provide education for optimal nutrition during critical stages of growth and development. The program provides an array of support for families including breastfeeding support and promotion; referrals to needed medical and social services in the community; and assessment of client nutritional status. WIC also provides checks for healthy foods based on the clients' nutritional needs. WIC recipients show higher birth weight, lower infant mortality, improved blood iron levels and diets, improved brain and neurological development, and lower use of intensive care nurseries compared to infants born to lower income mothers that have not benefited from proper nutritional food supplements.

2009 Accomplishments and Milestones

» Increased the percentage of new mothers discharged from the hospital as "breastfeeding mothers from 50.84% to 57.58%.
» Increased WIC participant fruit and vegetable consumption by 100%.
» Substituted whole milk with 1% low fat milk for all WIC participants over the age of two based on health recommendations.

NEWBORN SCREENING AND FOLLOW-UP

The purpose of this program is to screen all newborns in Rhode Island for metabolic, endocrine, hemoglobin, hearing, and developmental risk factors to identify risks at the earliest possible point. If risk factors are identified as a result of screening, information and linkage to care related to these risk factors will provide diagnosis, treatment, and follow-up strategies to the newborns' parent(s) and caregivers. Outreach and home visits to children and families with specific risk factors are made to ensure that they receive follow-up care and support. Outreach visits are also made to families whose children have fallen out of care. Data about confirmed diagnoses related to metabolic and hearing screening is provided to national databases and is used for quality improvement and quality assurance with hospitals, specialty clinics, and primary care providers. Screening and follow-up policies are designed in collaboration with national and regional partners for early identification of maternal and infant risk, and linkage to services to prevent or mitigate poor health and/or developmental outcomes. A significant proportion of home visits are to children of racial and ethnic minority living in poverty. All home visits incorporate health and nutritional recommendations, support breastfeeding, and provide referrals to lactation consultants as necessary. First Connections home visiting ensures linkages to many community-based resources including WIC, Early Intervention, Family Support, and others. Children with indicated signs of abuse and/or neglect, or children who are identified for early Intervention, are screened for eligibility through a HEALTH partnership with the Department of Children, Youth, and Families (DCYF).

2009 Accomplishments and Milestones

» Achieved 99.7% screening rates for all newborns in Rhode Island.

EARLY CHILDHOOD DEVELOPMENTAL SCREENING AND FOLLOW-UP

Early Childhood Developmental Screening and Follow-Up are programs designed to increase the number of young children (birth to age 8) receiving standardized, comprehensive, developmental and behavioral screenings (child wellness screen) in community-based settings consistent with current recommendations of the American Academy of Pediatrics (AAP). The purpose of these programs is to provide follow-up for young children who receive developmental and/or behavioral screening with results that were out of the normal range. Follow-up in the form of training and technical assistance support is also provided for their care providers, including child care providers, physicians, and families. Follow-up is provided to young children and their families in community-based settings, when possible. Early Childhood programs also provide consultation to child and primary care providers who see a high number of children with risk factors for poor developmental or mental health outcomes.

2009 Accomplishments and Milestones

» Added 75 community-based childcare screening sites: 50 Childcare Centers, 25 Primary Care.
» Added five new follow-up community based childhood and physician settings.
» Ensured that 100% of children who needed follow-up services received them.

SUCCESSFUL START

Successful Start is an early childhood system building initiative with over 200 stakeholders, including leadership from state and community agencies. In 2003–2005 a strategic plan for early childhood systems and services was developed, with HEALTH facilitating the implementation of components of the plan since 2005. Successful Start focuses on coordinating five system components: Medical Homes, Social and Emotional Health, Early Care and Education, Parent Education, and Family Support. The Steering Committee works to ensure that the state agencies have consistent policies; funding streams are maximized and blended; gaps in services are identified; and families are able to access and receive needed services.

2009 Accomplishments and Milestones

» Expanded comprehensive evidence-based program for families with young children at high risk.
» Improved implementation of new mental health consultation to medical homes by 100%.

RI-LAUNCH

Linking Actions for Unmet Needs in Children's Health (RI-LAUNCH) is a federally funded initiative focused on both systems building and service provision. RI-LAUNCH places mental health clinicians in primary care practices and child care centers to address the needs of children birth to 8 years old, and their families, that have been identified through a comprehensive, standardized, screen as needing additional services. RI-LAUNCH uses a comprehensive approach to health, including good nutrition and physical health. Using a combination of several standardized tools, children receive a wellness screen in community-based settings to assess overall health. If a screen indicates services are needed, the children receive follow-up care through RI-LAUNCH, or other appropriate follow-up programs. RI-LAUNCH also works with the Successful Start Steering Committee to identify and solve barriers within the system of early childhood services.

2009 Accomplishments and Milestones

» Provided Mental Health Consultation in three Medical Homes and five Child Care Centers.

ADOLESCENT HEALTH

The Adolescent Health program works to promote healthy adolescent development through statewide systems, policies, and initiatives, as well as targeted interventions to address health risks in high-need communities. The Program engages partners, including youth, to focus on medical home models for adolescents, social and emotional health supports, as well as piloting integrated community-based efforts to support adolescents and reduce risk taking behavior.

2009 Accomplishments and Milestones

» Decreased the birth rate for teenagers 15–17 years old from 21 births per 1,000 in 2004 to 18.3 births per 1,000 in 2008.

» Partnered with three local youth groups in a Photovoice participatory research project related to health disparities and social justice issues in maternal, adolescent, and child health, this work was featured at the New England Regional Minority Health Conference.

» Ensured access to family planning, pregnancy testing, and health risk assessments to teens through the Title X program.

» Participated on the RI Prematurity Task Force and the RI Teen Pregnancy Prevention Coalition working to ensure access to comprehensive primary and preventive health care services for teens.

» Engaged minority youth in ethnographic research and recommendation setting around adolescent health policy/practice. The results of their efforts were shared widely within HEALTH and with our partners.

» Tracked teen births (e.g., race/ethnicity, city/town of residence, etc.) and other factors, worked with Providence Plan to determine the health and educational outcomes of children born to teens and of the teen mothers.

PREVENTIVE SERVICES AND COMMUNITY PRACTICES TEAM

Improve the quality of preventive and community services through integration of internal and external program resources by increasing access and availability to vulnerable populations.

« PATRICIA RAYMOND, RN, MPH-TEAM LEAD

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Office of Immunization :: Virginia Paine, RN, MPH, Manager, Deputy Team Lead, 401.222.4602

Office of HIV/AIDS and Viral Hepatitis :: Paul Loberti, MPH, Chief, 401.222.7545

Oral Health Program :: Laurie Leonard, MS, Manager, 401.222.2433

Family Planning/Ryan White HIV Care Program :: Cheryl LeClair, MSW, Assistant Administrator, 401.222.5942

OFFICE OF IMMUNIZATION

The primary goal of the Office of Immunization is to prevent and control vaccine preventable disease in Rhode Island by maximizing the number of residents who are fully immunized. This is achieved by implementing systems for vaccine purchase and distribution; quality assurance; public and provider education; information dissemination; surveillance; and community collaboration. The Office of Immunization includes a universal pediatric program that provides all recommended vaccines to providers for children birth through 18 years of age , as well as an adult immunization program that currently provides influenza and pneumococcal vaccines to providers for individuals 19 years of age and older.

2009 Accomplishments and Milestones

» 90% immunization coverage rates to protect against vaccine-preventable diseases in children under 2 years of age and children entering kindergarten.

» Highest influenza immunization rates (80%) in US among adults 65 and older in 2008.

» Highest influenza immunization rates (61%) in US among children under 2 years of age in 2008.

» 100% of RI pediatric providers are reporting vaccine usage to KIDSNET, RI's registry for immunization and other children's preventive services.

OFFICE OF HIV/AIDS AND HEPATITIS

The Office of HIV/AIDS and Viral Hepatitis works to reduce the number of new HIV/AIDS and hepatitis cases in Rhode Island by providing culturally and linguistically appropriate preventive services, as well as access to outpatient services for persons living with HIV/AIDS. Preventive services include: the needle exchange program; education and outreach; counseling; immunizations and testing for HIV-Hepatitis B and C. HIV/AIDS services include medical and non-medical case management: the AIDS Drug Assistance Program (ADAP); access to oral health care; housing services; nutrition therapy; transportation; and emergency financial assistance.

2009 Accomplishments and Milestones

» 782 individuals visited Needle Exchange, Counseling, Outreach and Referral Program and 14,578 syringes and prevention kits were distributed.

» HIV infection due to intravenous drug use dropped from 50% in 1989 to 16% in 2008 among all other risk factors.

RYAN WHITE HIV CARE PROGRAM

The Ryan White HIV Care Program provides persons living with HIV/AIDS access to culturally and linguistically appropriate outpatient health services; AIDS Drug Assistance Program (ADAP) medications; oral health care; health insurance premium and cost-sharing assistance; housing services; medical nutrition therapy; medical case management services including treatment adherence services; medical transportation; emergency financial assistance; and non-medical case management services. HIV/AIDS disproportionately impacts low-income persons and minorities.

2009 Accomplishments and Milestones

» Increased medication disbursement from 753 clients to 836 clients in need of AIDS/HIV medications.

» Rhode Island ADAP secured 95% of the highest rated antiretroviral medication used to treat HIV patients.

HIV PREVENTION COOPERATIVE AGREEMENT

The HIV Prevention Program works to reduce the number of new HIV/AIDS cases in Rhode Island. Special consideration to reduce the number of new cases is given to communities of color due to the disproportionately high rates of HIV/AIDS. The HIV Prevention Program provides community support for HIV testing; health education and risk reduction; prevention for people living with HIV; comprehensive risk reduction counseling; and minority initiatives. Community programs are culturally and linguistically appropriate. The prevention programs are proven to be effective and are continuously evaluated and monitored for accuracy, completeness, and effectiveness. The reported outcomes are recorded on a yearly basis. Consultant services in evaluation, community planning facilitation, and capacity building are made available to HEALTH staff and community providers. Partner counseling and referral service are provided by HEALTH staff to the partners of all new HIV/AIDS cases, as well as provider support in

locating and post test counseling of new index cases. HIV prevention funds are coordinated with a community planning process and anchored in a Comprehensive Plan for HIV Prevention.

2009 Accomplishments and Milestones

» RI Community Planning Group completed the five year plan for prevention with new priorities populations and interventions.

» Implemented new reporting systems for Health Education/Risk Reduction, CTR (HIV Counseling), PCRS (Partner Notification Referral Specialist) and ENCORE (Encore Education, Needle Exchange, Counseling, Outreach and Referral).

HIV/AIDS SURVEILLANCE PROGRAM

The primary goal of the HIV/AIDS surveillance program is to monitor the number of new HIV/AIDS cases in Rhode Island; monitor the changes in the disease transmission among people at high risk for HIV/AIDS infection; and identify HIV/AIDS cases of public health importance to better understand the disease impact. The program helps to assess the disease impact among certain target populations, especially among communities of color, who are disproportionately affected by HIV/AIDS. The HIV/AIDS Surveillance program works closely with several internal partners on projects that contribute to decreasing HIV/AIDS morbidity and mortality in Rhode Island. The HIV/AIDS Surveillance program works closely with HIV Provider Community of Rhode Island to capture important case related data from new and existing HIV/AIDS cases. Data collected as part of the case reports are de-identified, analyzed, and sent to the CDC on a regular basis. Data are also published in the Annual Epidemiological Profile that helps the prevention programs and Rhode Island Community Planning Group (RICPG) to identify target areas. The Profile also provides information directly to community resources so that caseworkers and providers can adequately identify and address HIV/AIDS health concerns among disproportionately affected communities in Rhode Island.

2009 Accomplishments and Milestones

» HIV Name Reporting to identify new and existing disease cases.

» Routine HIV Testing is provided in Obstetric settings.

» Provided Partner Notification Referral Specialist referral for all newly reported HIV/AIDS cases.

ADULT VIRAL HEPATITIS PREVENTION AND HARM REDUCTION

The Adult Viral Hepatitis Prevention and Harm Reduction programs provide uninsured and under-insured high risk Rhode Islanders with access to culturally and linguistically appropriate harm reduction and prevention services. The programs provide many prevention services to Rhode Island communities, including: education, needle exchange, counseling, HIV, Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) testing, the administration of preventive Hepatitis A Virus (HAV) and HBV vaccines, and referrals.

2009 Accomplishments and Milestones

» 1,271 referrals were made for services compared to 781 referrals in 2008.
» 102 Education Needle Exchange Counseling Outreach and Referral (ENCORE) Pre-Enrollment interviews were completed.
» 782 individuals visited ENCORE exchange sites where 14,578 syringes were distributed and 3,865 were turned in.

ORAL HEALTH PROGRAM

The mission of the Oral Health Program (OHP) is to achieve optimal oral health for all by eliminating oral health disparities in Rhode Island while also integrating oral health with overall health. To achieve this mission, the OHP focuses on prevention of oral disease through assurance of state-level oral health and public health leadership; documentation of the burden of oral disease in Rhode Island; and collaboration with statewide partners and the Rhode Island Oral Health Commission. In association with these partnerships, the OHP implements goals and objectives identified in the Rhode Island Oral Health Plan; increases access to and utilization of preventive interventions such as dental sealants for children and appropriate water fluoridation for all Rhode Islanders. The OHP works to assure sound policy decisions through education of policy makers; promotes and provides continued education for health professionals to enhance community efforts to prevent, control, and reduce oral diseases; and promote community capacity for high quality, culturally sensitive oral health services.

2009 Accomplishments and Milestones

» Rhode Island ranked 6th (of 36 states completing similar 2007 surveys) with 48% of third graders identified with tooth decay for treatment.
» 370 RI oral health professionals have received continued professional education in pediatric dentistry, special care dentistry, and geriatric dentistry through the Annual RI Dentistry Mini-Residency Series sponsored by the OHP.

FAMILY PLANNING PROGRAM

The Family Planning Program provides affordable, federally funded Title X family planning services including: contraceptives; contraceptive and reproductive health counseling; Sexually Transmitted Disease (STD) education; pelvic exams; blood pressure check; physical exams; cervical cancer screenings; pregnancy testing; clinical breast exams; HIV counseling, testing, and referral services; and comprehensive health risk assessment and referral services to culturally diverse, low-income women and men, including adolescents.

2009 Accomplishments and Milestones

» Rhode Island had a 69.2% rate of intended pregnancies as compared to the national Healthy People 2010 goal of 70%.

STAFF DIRECTORY BY TEAM

EXECUTIVE ADMINISTRATION	EXT	ROOM
Community, Family Health and Equity Program		
Ana Novais, Executive Director	5117	408
Peter Simon, Medical Director	5928	408
Carol Hall-Walker, Chief Program Administrator	2589	409
Lori Zelano, MPA, Acting Chief Program Operations	4618	302
Risha Laster, Clerk Secretary	5924	302
Candy Domenech, Grants Coordinator	7772	302
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Monica Tavares, Office of Special Health Care Needs	5371	304
Jessica Vandal, Disability and Health Program Support	5371	304
Laura Jones, Family/Peer Resource Specialist	5372	304
Alberto Perez, Transition Resource Specialist	4963	304
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Deb Golding, Healthcare Transition	5954	304
Alberto Perez, Healthcare Transition	4963	304
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John O'Brien, Healthy Workplaces	2440	206
David Johnston, Healthy Workplaces	2594	206

HEALTHY HOMES AND ENVIRONMENT	EXT	ROOM
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Anne Cardoza, Operations	7791	206
Tammie Smith, Operations	7751	206
Angela Olteanu, Operations	7753	206
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Katy Heneghan, Healthy Housing	2595	206
Marty Tahakjian, Healthy Housing, Radon/Asbestos	3613	206
Stephan McDonagh, Healthy Housing, Radon/Asbestos	7746	206
Tom Caruolo, Healthy Housing, Healthy Schools	7748	206
Bonnie Cassani-Brandt, Healthy Housing, Lead	7777	206

CHRONIC CARE AND DISEASE MANAGEMENT	EXT	ROOM
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Angela Ankoma, Initiative for a Healthy Weight	7630	409
Lisa Hawthorne, Initiative for a Healthy Weight	1383	408
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Michael Lauder, WIC	5930	302
Charles White, WIC	5939	302
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PREVENTIVE SERVICES AND COMMUNITY PRACTICES	EXT	ROOM
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Lucille Minuto, Assistant Administrator Office of HIV/AIDS and Hepatitis	7549	106
Paula Lopes, Office of HIV/AIDS and Hepatitis	7547	106
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Kathy King Barton, Office of HIV/AIDS and Hepatitis	7543	106
Linda Quattro, Office of HIV/AIDS and Hepatitis	7541	106
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Luba Adamova, Ryan White	7631	302
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Katy Miller, Oral Health Program	5934	309
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Boehm, Lisette	7632	409
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Bruce, Donna	4623	302
Cabral, Antonio	3611	206
Campagna, Kristine	5927	302
Cappelli, Denise	4610	302
Cardoza, Anne	7791	206
Caruolo, Thomas	7748	206
Carr, Maria	7633	106
Cassani-Brandt, Bonnie	7777	206
Castellano, Elizabeth	5118	408
Cesare, Susan	4851	404
Ciccia, Viviana	4779	409
Chowdhury, Sutopa	7540	106
Cotoia, Fran	4638	302
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DePina, Luisa	4621	302
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Everage, Nick	7696	404
Feyisitan, Rilwan	5940	304
Figuiera, Lori	1011	402
Flanders, Sharon	1151	403
Francesconi, Mark	5988	309
Garneau, Deb	5929	304
Gjelsvik, Annie	5985	404
Golding, Deb	5954	304

NAME	EXT	ROOM
Goldman, Dona	6957	409
Hall-Walker, Carol	2589	409
Hawthorne, Lisa	1383	408
Heneghan, Katy	2595	206
Hernandez, Diane	5887	304
Hosmer, James	1674	309
Jones, Laura	5372	304
Johnston, David	2594	206
Kaur, Gurpreet	4633	302
Khamsomphou, Phanida	4609	302
Kelly-Flis, Patty	3329	404
King-Barton, Kathleen	7543	106
LaCasse, Melissa	7641	408
Ladak, Farah	7899	408
Larose, Christelle	4606	302
Laster, Risha	5924	302
Lauder, Michael	5930	302
Lawson, Eliza	4847	408
LeClair, Cheryl	5942	302
Leonard, Laurie	2433	309
Leonard, Susan	5947	302
Liwanga, Peguy	4630	302
Lloyd, Shane	4620	303
Loberti, Paul	7545	106
Lopes, Paula	7547	106
Lundquist, Carla	7626	304
Luther, Karen	3044	408
Lyman, William	4628	302
Manzi, Anthony	5885	302
Marceau, Kathy	4624	309
Marshall, Robert	1626	410
Matias, Maria	7623	404
McCants-Derisier, Dana	7625	408
McKiernan, Paul	4639	309
McNeilly, Barbara	4640	304
McDonagh, Stephan	7746	206
Miller, Mary Anne	4354	302
Miller, Katherine (Katy)	5934	309
Miller, Marian	7635	409
Miller Barbone, Gail	5951	304
Minuto, Lucille	7549	106
Moy-Gurney, Marilyn	5116	404
Moynihan, Lorraine Asselin	7548	106

NAME	EXT	ROOM
Newell, Deborah	4421	404
Novais, Ana	5117	408
O'Brien, John	2440	206
Olteanu, Angela	7753	206
Olubumni, Adekugbe	4643	309
Paine, Virginia	4602	309
Parillo, Zoanne	7546	106
Patriarca-O'Flaherty, Mia	5984	302
Pearlman, Deborah	5937	209
Perez, Alberto	4963	304
Perez, Beatriz	7627	409
Piluso, Lauren	4637	302
Polselli, Colleen	4615	304
Porrazzo, Deborah	7876	309
Primeau-Faubert, Anne	7747	206
Quattro, Linda	7541	106
Raleigh, Lisa	5923	302
Raymond, Patricia	5921	309
Reilly-Chammat, Rosemary	5922	302
Rosa-DaFonseca, Veronica	4755	106
Santos, Benvinda	7637	409
Shedd, Jan	4872	409
Shepardson, Susan	7621	408
Silva, Paul	7749	206
Simon, Peter, MD	5928	408
Smith, Tammie	7751	206
Spink, David	7756	206
Sutton, Nancy	4040	409
Tahakjian, Martin	3613	206
Tamburrino, Lori	5945	309
Tamburro, Denise	4642	302
Tavares, Monica	5371	304
Then, Fiordaliza	5918	302
Vallejo, Maria Luisa	5952	303
Vandal, Jessica	5371	304
Vanderslice, Robert	7766	206
Veazey, John	6843	403
Volquez,Venus	3283	404
Wallace, Heidi	4631	309
Washburn, Tricia	5946	302
Wheat, Anna	5086	402
White, Charles	5939	302
Wilson, Pam	7899	408
Xiong, Toushoua	4636	302
Zelano, Lori	4618	302

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APPENDIX B:

Maternal and Child Health (MCH) FactSheets

2010

Overview

Maternal and Child Health Facts

The Rhode Island Department of Health

Title V Health Disparities, Equity, and the Life Course

Maternal and Child Health Services Title V

Title V has operated as a Federal-State partnership for 75 years. When the Social Security Act was passed in 1935, the Federal Government, through Title V, pledged its support of State efforts to extend and improve health and welfare services for mothers and children.

Rhode Island uses Title V funds to design and implement a wide range of maternal and child health programs that meet national and State needs. Although specific initiatives may vary among the 59 States and jurisdictions utilizing Title V funds, all programs work to do the following:

- Reduce infant mortality and incidence of handicapping conditions among children
- Increase the number of children appropriately immunized against disease and the number of children in low-income households who receive assessments and follow-up diagnostic and treatment services
- Provide and ensure access to comprehensive perinatal care for women; preventative and child care services; comprehensive care, including long-term care services, for children with special health care needs; and rehabilitation services for blind and disabled children under 16 years of age who are eligible for Supplemental Security Income
- Facilitate the development of comprehensive, family-centered, community-based, culturally competent, coordinated systems of care for children with special health care needs

What are health disparities, equity, and the life course?

A fundamental principle of public health is that ALL people have a right to health and the health of America depends on the health of everyone. **Health Disparities** exist if there is a significant difference in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates of health conditions and health status among different groups of people. Most health disparities affect groups that are disadvantaged or marginalized because of their of socioeconomic status, race/ethnicity, gender, sexual orientation, disability status, geographic location, or any combination of these.

People in such groups not only experience worse health but also tend to have less access to healthy food, good housing and safe neighborhoods, quality education, and freedom from discrimination—or the **social determinants** or conditions that support health.

Health equity is when everyone, regardless of the social and economic circumstances present in their life, has the opportunity to achieve their full health potential. For many people, these disadvantaged conditions are pervasive during extended periods of time in one's life, and for some, membership in a particular group lasts a lifetime.

When we talk about individuals from birth through to adulthood, middle age and beyond we are looking at their lives across the **life course**. Fundamentally, our lives are "linked" such that circumstances or events earlier in life have the potential to impact conditions later in life. The social and economic conditions contributing to persistent disparities, which are often clearly evident at mid- and late life, may be anchored to earlier circumstances of the life course. Understanding the disparities that are present in each of our priority populations, across their life course, becomes critically important to understanding the needs and priorities of Title V populations toward the goal of achieving health equity.

Social Determinants

"A person's health and chances of becoming sick and dying early are greatly influenced by powerful social factors such as education, income, nutrition, housing, and neighborhoods."

(Source: Robert Wood Johnson Foundation: ISSUE BRIEF 7: December 2009)

Education

The impact of education can influence health in direct and indirect ways. Education not only influences the types of jobs an individual can obtain and money earned, but also affect opportunities for healthier living and access health care. Educational attainment is associated with health literacy, which impacts an individual's ability to communicate with health care providers, understand and follow instructions, and navigate the health system.

(Source: Kaiser Family Foundation: Putting Women's Health Care Disparities on the Map: June 2009)

- The Rhode Island four-year graduation rate for all students in the class of 2008 was 74%, the dropout rate was 16%, 3% of students completed their GEDs within four years of entering high school and 7% were still in school in the fall of 2008.

- The Rhode Island four-year graduation rate for the class of 2008 was 69% for males and 79% for females. While female students have lower dropout rates than males, national data show that female dropouts are significantly more likely to be unemployed and they earn less on average than male dropouts from the same racial and ethnic group.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: High School Graduation)

Children in Single Parent Households

- Hispanic single-parent families are more likely than other single-parent families in Rhode Island to live in poverty. Black and Hispanic married-parent families are also more likely than White married-parent families in Rhode Island to live in poverty.

- The number of adults a child lives with is associated with the amount of parental and economic resources available to promote that child's well-being. In 2007, 7% of children in Rhode Island lived in a household where the unmarried head of household lived with a partner.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children in Single Parent Households)

Poverty

The association between income and health is well established. Poor individuals are less likely to have access to health coverage, less likely to have a usual source of care, and less likely to have routine screenings and check-ups. Poor access is associated with a higher risk of delays in care and potentially poorer health outcomes. Poverty also indirectly affects health through factors such as nutrition and stress.

Table 1. Rhode Island: Percent of Population Living Below Poverty by Gender, Age Categories, and Race Ethnicity (2007-2008), U.S. (2008)

% of Population Living Below Poverty	Rhode Island	United States
Gender		
Female	14.5%	18.0%
Male	13.3%	16.0%
Total	13.9%	16.8%
Age		
Children 18 and under	21.5%	25.0%
Adults 19-64	13.9%	16.8%
Elderly 65+	11.0%	12.6%
Total	15.4%	18.3%
Race / Ethnicity		
White	10.7%	12.3%
Black	31.2%	33.2%
Hispanic	36.6%	30.6%
Other	28.2%	20.6%
Total	15.4%	18.3%

Population Demographics

The population of Rhode Island is almost equally split among males and females for much of the life course, although there is a slightly higher percentage of males under 18 years old (11.1% compared to 10.6%). At approximately 25 years of age, the percent of the total population that are females in the categories represented below are higher than that of males for the rest of the life course.

Table 2. Rhode Island: Percent of Population by Gender and Age Categories (July 1, 2008)

Age Categories	% Male	%Female
Under 18 years	11.1	10.6
Under 5 years	3.0	2.8
5 to 13 years	5.4	5.2
14 to 17 years	2.7	2.6
18 to 64 years	31.6	32.6
18 to 24 years	5.5	5.4
25 to 44 years	13.1	13.3
45 to 64 years	13.0	13.8
65 years and over	5.7	8.4
Median age (years)	37.2	40.2

(Source: Population Division, U.S. Census Bureau (Release: May 14, 2009))

Citizenship Status

According to the Census Bureau's March 2008 and 2009 Current Population Survey nearly 69,500 persons living in Rhode Island are non-citizens. This is roughly 7% of the total population for the State. Compared to total U.S. population, the percent of individuals who are citizens (93%) and non-citizens (7%) is similar in Rhode Island.

Race & Ethnicity

The population of Rhode Island is becoming increasingly diverse. From 1990 to 2000, Rhode Island's minority population increased by 77% while the White (non-Hispanic) population decreased by 3%. Today, nearly 20% of the state population is a racial or ethnic minority (Census Bureau's 2007-2008 American Community Survey). In general, the median age of Rhode Island's minority population (26 years) is lower than the median age for the overall state population (38 years).

Table 3. Rhode Island: Percent of Population by Race / Ethnicity (2006-2008)

Rhode Island Population by Race / Ethnicity	Population Estimate	% Population
Total Population	1,054,306	
Not Hispanic or Latino:	935,402	88.7
White alone	829,742	78.7
Black or African American alone	49,994	4.7
American Indian and Alaska Native alone	3,913	0.4
Asian alone	28,495	2.7
Native Hawaiian and Other Pacific Islander alone	143	0.0
Hispanic or Latino	118,904	11.3

(Source: U.S. Census Bureau, 2006-2008 American Community Survey)

Mortality

Chronic diseases

- Heart disease, stroke, cancer, and diabetes are among the most prevalent, costly, and preventable of all health problems. Leading a healthy lifestyle (avoiding tobacco use, being physically active, and eating well) greatly reduces a person's risk for developing chronic disease. Access to quality and affordable prevention measures (including screening and appropriate follow-up) are essential steps in saving lives, reducing disability and lowering costs for medical care.

- The top five causes of death among all females in Rhode Island are heart disease, cancer, chronic respiratory diseases, stroke, and Alzheimer's disease. For racial and ethnic minority populations, diabetes and unintentional injuries were among the top five causes of death.

Table 4. Top 5 Leading Causes of Death for Females (2006)

	All Races (Non-Hispanic)	White	Black	Hispanic
1	Heart Disease	Heart Disease	Heart Disease	Cancer
2	Cancer	Cancer	Cancer	Heart Disease
3	Chronic Respiratory Disease	Chronic Respiratory Disease	Diabetes	Stroke
4	Stroke	Stroke	Unintentional Injury	Diabetes
5	Alzheimer's Disease	Alzheimer's Disease	Chronic Respiratory Disease	Unintentional Injury

(Source: National Center for Health Statistics (NCHS), National Vital Statistics System)

Access & Utilization

Table 5. Health Insurance Coverage of Women Ages 0-64, RI (2007-2008)

	Employer	Individual	Medicaid	Other Public	Uninsured
Rhode Island	64%	5%	18%	2%	11%

(Sources: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2008 and 2009 Current Population Survey (CPS: Annual Social and Economic Supplements))

Children and Health Insurance

- Between 2006 and 2008, 7.0% of Rhode Island's children under age 18 were uninsured, compared to 10.8% of children in the U.S. Rhode Island ranks 14th in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents' employers.
- An estimated 4,983 uninsured children live in Rhode Island families with incomes above 250% of the federal poverty level ($44,000 for a family of three in 2008), the limit for RIte Care eligibility. Approximately 72% (13,078) of the estimated 18,141 uninsured children in Rhode Island between 2006 and 2008 were eligible for RIte Care based on their family incomes but were not enrolled.
- Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from 73.3% between 1999 and 2001 (an 8% decline).

(Source: Rhode Island KIDS COUNT analysis of Current Population Survey data, 2009)

Health Status

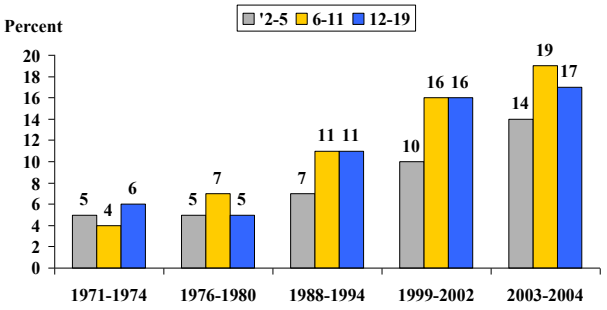
Obesity

Obesity rates have been on the rise over the past three decades in both Rhode Island and the United States. More deaths in the United States are associated with obesity and inactivity than with alcohol and motor vehicles combined. Obesity is associated with heart disease, type II diabetes, hypertension, and other acute and chronic health problems. For women, obesity has also been associated with infertility, arthritis, and post-menopausal breast cancer.

(Source: Kaiser Family Foundation: Putting Women's Health Care Disparities on the Map: June 2009)

- Unhealthy diet and sedentary life styles are concerns for all adults. But identifying demographic and behavioral differences between men and women might stimulate the creation of gender-specific strategies to promote an active lifestyle and healthy diet.

Overweight Children*
United States, 1971-2004



Note: overweight = BMIs ≥ 95th percentile

Source: National Health and Nutrition Examination Survey (NHANES)

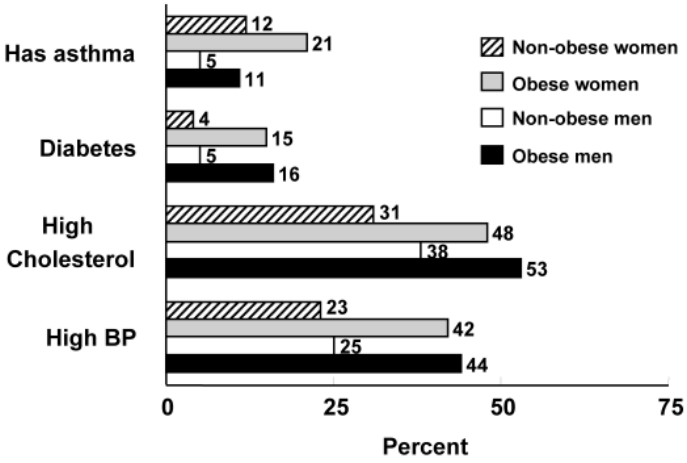
Overweight children are susceptible to depression, negative self-image and low self-esteem that can lead to social isolation and high-risk behaviors. Adolescents who are overweight have a 70% chance of becoming overweight or obese adults, with increased health risks and higher health care costs than those at a healthy weight.

- Over one in six (17.9%) Rhode Island children entering kindergarten during the 2007-2008 school year were obese, with a BMI at or greater than the 95th percentile.

- Thirty percent of Hispanic children entering kindergarten in Rhode Island during the 2007-2008 school year were obese, compared to 16% of their non-Hispanic peers.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Obesity)

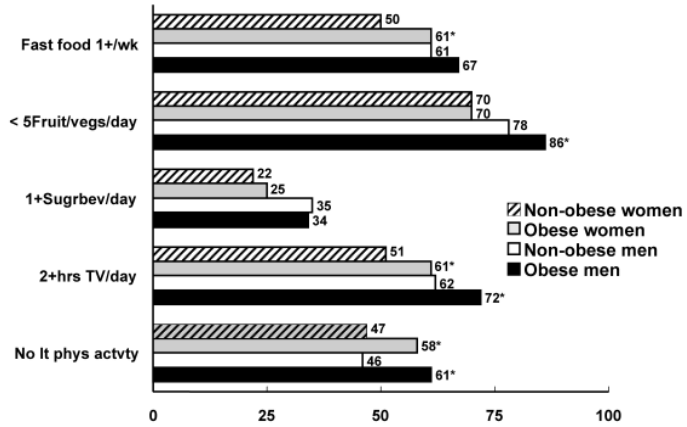
Figure 1. Health conditions among obese and non-obese adult men and women, ages 20+, RI 2007.



Health by Numbers: VOLUME 92 NO. 12 DECEMBER 2009

Health Practices & Behavior

Figure 2. Behavioral risks among obese and non-obese adult men and women, ages 20+, RI 2007.



Health by Numbers: VOLUME 92 NO. 12 DECEMBER 2009

Tobacco

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, an estimated 438,000 people in the U.S. die prematurely from smoking or exposure to second hand smoke, and another 8.6 million have a serious illness caused by smoking. For every person who dies from smoking, more people suffer from at least one serious tobacco-related illness.

- According to the 2007 Rhode Island Youth Risk Behavior Survey, the percentage of Rhode Island high school students who reported smoking cigarettes during at least 1 day during the previous 30 was 15.1%, compared to 20.0% nationally.

Substance Abuse

The use and/or abuse of substances by children and youth poses health and safety risks to them, their families, their schools and their communities. The number of adolescents using alcohol, tobacco and illegal drugs has been declining steadily both in the U.S. and n Rhode Island for the past decade.

- Over the past decade, there has been a decline in reported use of alcohol and illegal drugs among Rhode Island middle school and high school students. After an initial drop, the reported rates of cigarette use have remained steady. In the 2007-2008 school year, as was the case in previous years, students in school districts in the core cities report lower use of alcohol, tobacco and cigarettes than do students in the remainder of the state.
- In 2007, approximately 8% of youth ages 12-17 in the U.S. met standard diagnostic criteria indicating the need for treatment for an alcohol and/or illicit drug use problem. Few of these youth received specialty treatment (6% of those needing treatment received specialty alcohol treatment and 10% received specialty illicit drug use treatment).
- Nationally in 2006 and 2007, 26% of youth ages 12-20 reported obtaining alcohol for free from a non-relative aged 21 or over, 15% from another underage person, 6% from a parent or guardian, 9% from another relative aged 21 or older, and 4% reported taking it from their own home without permission.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Alcohol, Cigarette, and Drug Use by Teens)

- A recent 2009 report from the U.S. Substance Abuse and Mental Health Services Administration, or SAMHSA showed Rhode Island had the highest rate of illicit drug use in the nation among people 12 or older. providing state-by-state analyses of substance abuse and mental illness patterns reveals that there are wide variations in the levels of problems like illicit drug use found among the states, but that every state suffers from these problems. For example, among those aged 12 and older, Iowa had less than half the current illicit drug use rate of Rhode Island (5.2 percent vs. 12.5 percent) - yet Iowa's population aged 12 and older also had one of the nation's highest levels of people experiencing alcohol dependence or abuse in the past year (9.2 percent).

Child Abuse and Neglect

Preventing child abuse and neglect is critical to helping children grow into strong, healthy, productive adults and good parents. Children are at increased risk for maltreatment if their parents or caregivers are overwhelmed by multiple problems such as inadequate income, family stressors, isolation from extended family or friends, drug and/or alcohol abuse, or depression. Child maltreatment can lead to low academic achievement, juvenile delinquency, substance abuse, behavioral, emotional and mental health problems, teenage pregnancy, adult criminality and increased likelihood of becoming an adult victim of physical or sexual abuse.

In 2008 in Rhode Island, there were 1,913 indicated investigations of child abuse and neglect involving 2,743 children. The child abuse and neglect rate per 1,000 children under age 18 was more than two times higher in the core cities (17.0 victims per 1,000 children) compared to the remainder of the state (7.0 victims per 1,000 children). Almost half (47%) of the victims of child abuse and neglect in 2008 were young children under age six and more than one-third (35%) were ages three and younger.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Child Abuse and Neglect)

Additional Resources

For additional information about the materials presented in this, or any other data brief, please visit the Rhode Island Department of Health Website at:
www.health.ri.gov/

Or, to view the most recent publications from the Rhode Island Department of Health:
http://www.health.ri.gov/publications/

For additional information on any of the indicators presented in this, or any other data brief, as well as additional indicators, please visit Rhode Island KIDS COUNT at:
http://www.rikidscount.org/matriarch/default.asp

Pregnant Women

Maternal and Child Health Facts

The Rhode Island Department of Health

Access and Utilization

WIC Enrollment

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a preventive program providing nutritious food, nutrition education and improved access to health care. WIC serves pregnant women, infants and children under the age of five. Household income must be below 185% of the federal poverty level. Participants must have a specified health or nutritional risk (e.g., abnormal pregnancy weight gain, iron deficiency anemia, etc.).

WIC participation has been shown to reduce infant mortality (especially neonatal mortality), improve birth outcomes (including reducing the likelihood of low birthweight), protect against underweight and poor nutrition in infants, prevent overweight in young children, increase immunization rates, improve cognitive development, and increase the likelihood of having a source of regular medical care.

- As of September 30, 2008, 28,810 women, infants and children participated in the Rhode Island WIC Program. Among these participants, 16% were pregnant women, 7% were postpartum women, 23% were infants, and 54% were children aged 1-4. Nearly two thirds (66%) of the participants were White, 17% were Black/African American, 3% were Asian, and 14% were of other or multiple races. More than one-third (36%) of the participants were of Hispanic/Latino ethnicity. Among the 28,810 participants, 20,089 (69.7%) lived in the core cities. Participation rates in the WIC Program have been increasing and in 2008, 78% of those eligible statewide were enrolled in the program. This figure is higher among those living in the core cities with 84% of those eligible participating in the program.

(Source: Rhode Island Department of Health WIC Program Data and 2009 Rhode Island KIDS COUNT Factbook / Indicator: Women and Children Receiving WIC)

Late Initiation of Or No Prenatal Care

Early prenatal care is important to identify and treat health problems and influence health behaviors that can compromise fetal development, infant health and maternal health. Women receiving late or no prenatal care are at increased risk of poor birth outcomes such as having babies who are stillborn, low birthweight or who die within the first year of life. Prenatal care offers the opportunity to screen for and treat conditions that increase the risk for poor birth outcomes. Effective prenatal care also screens for and intervenes with a range of maternal needs including nutritional needs, social support, mental health, substance use, domestic violence, and unmet needs for food and shelter.

- In Rhode Island between 2003 and 2007, 12.1% of women giving birth either received no prenatal care or did not begin care until the second or third trimester, up from 9.4% in 2001-2005.

- Between 2003 and 2007 in Rhode Island, Asian women (21.1%), Black women (19.3%), Native American women (19.8%) and Hispanic women (16.3%) were significantly more likely to receive delayed prenatal care than White women (10.7%).

- Between 2003 and 2007, the rate of delayed prenatal care in the core cities (16.0%) was nearly twice the rate in the remainder of the state (8.8%). Newport was the only core city with a rate of delayed prenatal care (11.9%) better than the state rate (12.1%).

- Between 2003 and 2007, uninsured women in Rhode Island were nearly two and a half times more likely to receive delayed prenatal care (44.4%) as women enrolled in RIte Care (18.4%). Between 1995 and 2005, the percentage of women enrolled in RIte Care or Medicaid who began prenatal care in the first trimester increased from 80.4% to 83.8%.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Women with Delayed Prenatal Care)

Prevention of Birth Defects: Folic Acid Consumption

During 2004-2007, more than half (51.1%) of the Pregnancy Risk Assessment Monitoring System (PRAMS) survey respondents reported they had not taken a multivitamin during the month before they got pregnant. However, between 2004 and 2007, this figure fluctuated, rising from 47.6% in 2004 to 53.9% in 2006, and then dropping to 50.9% in 2007. Respondents were more like not to have taken a multivitamin if they were aged less than 20 (70%), had household incomes of less than $10,000 (69.5%), were single (69.2%), had less than a high school education (68.8%), had public insurance (68.7%) or were of Hispanic ethnicity (65.1%).

- Data from the Women's Health Screening and Referral Program indicate that 83% of women who completed a Care Questionnaire (while waiting for their pregnancy test results) were not taking a multivitamin with folic acid daily.

(Source: Rhode Island Department of Health Program Data)

Genetic Counseling and Testing

- During 2004-2007, 73.4% of PRAMS survey respondents indicated they were aware that their babies were tested in the hospital for genetic conditions. This figure varies by maternal demographics, where women were less likely to be aware of the testing if they were of Hispanic ethnicity (57.5%), household incomes less than $25K (66.7%), had public insurance (67.7%) or were less educated (69.0%).

- During 2004-2007, 73.4% of PRAMS survey respondents indicated they were aware that their babies were tested in the hospital for genetic conditions. This figure varies by maternal demographics, where women were less likely to be aware of the testing if they were of Hispanic ethnicity (57.5%), household incomes less than $25K (66.7%), had public insurance (67.7%) or were less educated (69.0%).

Health Status

Pregnancy Rates

In Rhode Island, during 2007, there were 16,615 pregnancies among women aged 15-44, which resulted in 12,328 (74.2%) live births, 3,651 (22.0%) induced abortions, and 636 (3.8%) spontaneous abortions. Between 2006 and 2007, the pregnancy rate decreased by 1.7%, from 74.6 to 73.3. Data for 2008 indicate that the number of births among Rhode Island residents decreased to 12.032 births, representing a 2.7% decline from 2007.

- The overall multiple birth rate (includes twins, triplet and higher order births) among Rhode Island residents has decreased to 35.2 per 1,000 according to 2007 data. This rate represents a 16.4% decrease from 2003, when the rate was 42.1. During 2007, there were 435 twin and triplet babies among the 12,365 births compared to 556 multiples among the 13,202 babies born in 2003. During 2005, Rhode Island's multiple rate (40.6) continued to be higher than the US rate (33.8).

- The cesarean section rate continues to rise nationally and in RI; nearly one in three RI babies are delivered via cesarean.

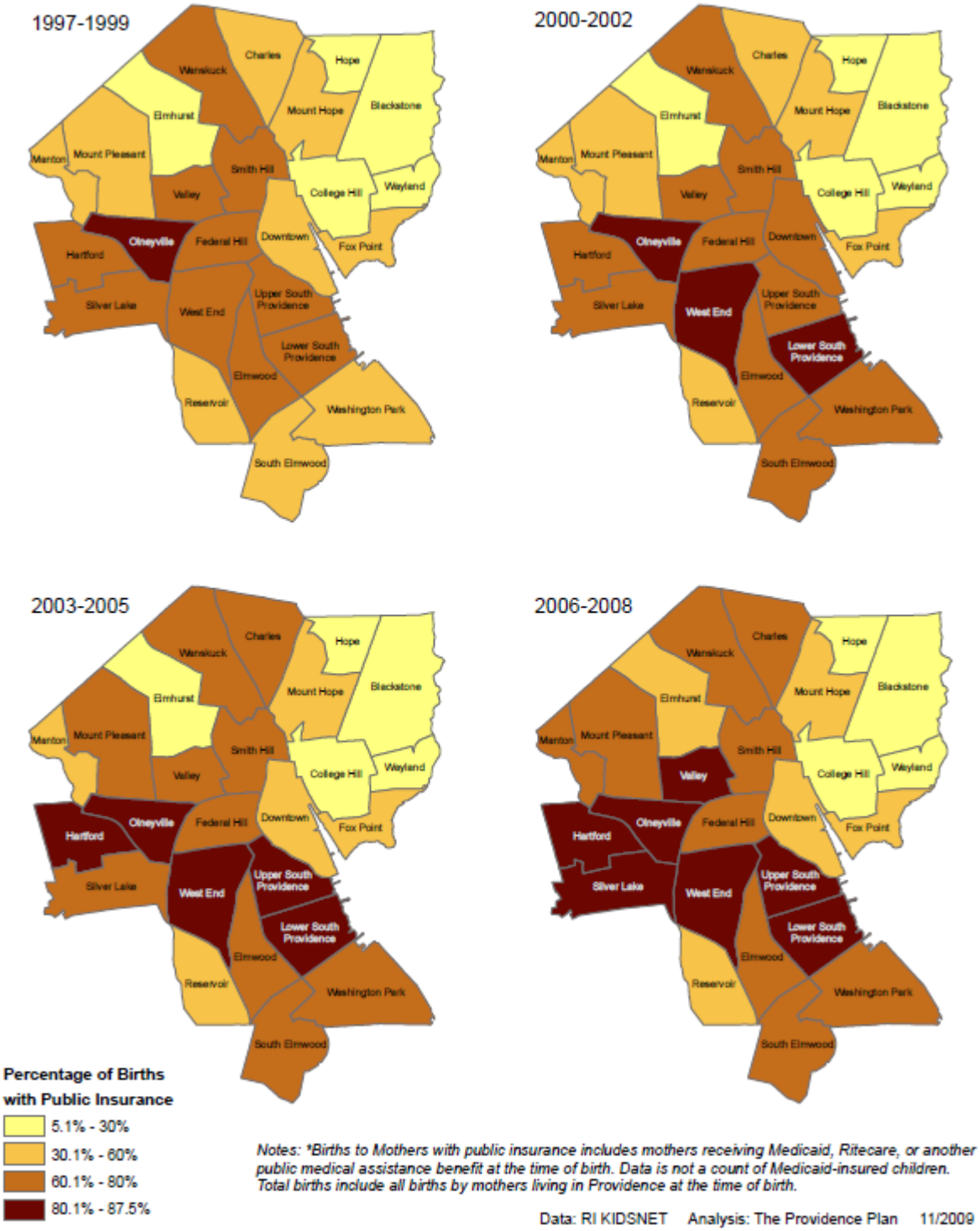
(Source: Rhode Island Department of Health Data)

Births Financed by Medicaid

In 2007, the number of births financed by Medicaid in Rhode Island was 5,657, or 47%. Only a decade earlier, in 1997, Medicaid births accounted for 30% of the 12,076 resident births, or 3,619 births.

(Source: RI Medicaid Research and Evaluation Project, DHS, Vital Statistics Birth File, RI Department of Health, CY 1995-2007)

Births to Mothers with Public Insurance* as a Percentage of Total Births, by Providence Neighborhood



*Notes: *Births to Mothers with public insurance includes mothers receiving Medicaid, Ritecare, or another public medical assistance benefit at the time of birth. Data is not a count of Medicaid-insured children. Total births include all births by mothers living in Providence at the time of birth.*

Data: RI KIDSNET Analysis: The Providence Plan 11/2009

Infant Mortality Rate (IMR)

Infant mortality rate is also called the infant death rate. It is the number of deaths that occur in the first year of life for 1000 live births. IMR. IMR is an important measure of the well-being of infants, children, and pregnant women. Infant mortality is associated with a variety of factors, including health status of women, quality of and access to medical care, socio-economic conditions, and public health practices.1 Communities with multiple problems such as poverty, unemployment and low literacy levels tend to have higher infant mortality rates than more advantaged communities. The two chief causes of infant death are low birthweight (particularly births at less than 750 grams) and prematurity.

- The overall infant mortality rate in Rhode Island for 2003-2007 was 6.3 deaths per 1,000 births. The infant mortality rate was 58% higher in the core cities than in the remainder of the state.
- The infant mortality rate in the U.S. has declined significantly in recent decades from 26.0 deaths per 1,000 births in 1960 to 6.9 deaths per 1,000 births in 2005.
- Preterm births are a major determinant of infant mortality in the U.S. In Rhode Island between 2003 and 2007 there were 7,610 preterm births (12% of all births).
- In Rhode Island between 2003 and 2007, the Black infant mortality rate was 12.1 deaths per 1,000 births, the Asian infant mortality rate was 6.6 per 1,000 births and the Native American infant mortality rate was 11.4 per 1,000 births. All minority groups had infant mortality rates greater than the rate for White infants (5.5 per 1,000 births). The Hispanic infant mortality rate was 8.3 per 1,000 births compared with 7.2 deaths per 1,000 births among non-Hispanic infants in Rhode Island.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Infant Mortality Rate)

Low Birthweight

An infant's birthweight is a key indicator of newborn health. Infants born weighing less than 5 pounds, 8 ounces are at greater risk for physical and developmental problems than infants born at normal weights. Increased risk of low birthweight is associated with maternal poverty, smoking and low levels of educational attainment.

- In Rhode Island between 2003 and 2007, 2% (1,035) of all infants born were very low birthweight (less than 1,500 grams).
- Over the past decade, the percentage of low birthweight infants has increased in Rhode Island and in the U.S., with particular disparities existing by race and ethnicity. In Rhode Island between 2003 and 2007, 13.8% of Native American infants, 11.1% of Black infants, 9.6% of Asian infants, and 8.3% of Hispanic infants were born with low birthweight, compared to 7.6% of White infants.
- Nationally and in Rhode Island, the rate of low birthweight infant births is higher for women under the age of 20 than for older women and is particularly high for girls who give birth under age. Between 2003 and 2007 in Rhode Island, the percentage of low birthweight infants born to mothers under the age of 20 was 10.4%, compared to 7.9% for mothers age 20 and above.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Low Birthweight Infants)

Birth Defects and Maternal Characteristics

According to 2003-2007 Rhode Island birth defects data, women who are 35 and older (523.9 per 10,000 live births), with less than a high school education (507.1), or no health insurance in Rhode Island (578.1) are at higher risk for having a newborn with a birth defect. It should be noted that since there were only 37 birth defects cases with no health insurance, reducing the statistical significance of the rate. Women with public health insurance were more likely to have a baby with a birth defect (523.6) compared to women with private insurance (424.4).

Racial/Ethnic and Geographic Disparities

- Data for the period 2003-2007 show that disparities in birth defects rates by race and ethnicity continue to persist in Rhode Island. Specifically, Black/African American women (595.8 per 10,000 live births) and those of Hispanic/Latino ethnicity (579.0) were more likely to have a newborn with a birth defect compared to Asian (401.2) and White (432.7) women.

- In Rhode Island during 2003-2007, the birth defects rate continues to be higher among women residing in the core cities (504.6 per 10,000 live births) than women living in the rest of the state (439.7). Rates were highest among those living in Pawtucket (596.6) and Central Falls (559.5).

(Source: Rhode Island Department of Health birth defects data)

Breast Feeding Rates

The American Academy of Pediatrics (AAP) identifies breastfeeding as the ideal method of feeding and nurturing infants and recognizes breastfeeding as a critical component in achieving optimal infant and child health, growth and development. Rhode Island tracks breastfeeding rates and infant feeding practices with its Pregnancy Risk Assessment Monitoring System (PRAMS), which was implemented in 2002.

- Between 2003 and 2007, more than half (57%) of all women who gave birth in Rhode Island chose to exclusively breastfeed their children, almost one-third (28%) chose to exclusively formula feed, and 12% chose to use a combination of breast and formula feeding. Of new mothers in Rhode Island between 2004 and 2007 who were surveyed approximately three months after giving birth, 73% reported having ever breastfed. Fifty two percent of these mothers reported continued breastfeeding at the time of the survey.

- In Rhode Island between 2006 and 2007, Black and Hispanic mothers were less likely to exclusively breastfeed than their Asian and White peers. However, Hispanic and Asian mothers were more likely to report any breastfeeding than women in other racial and ethnic groups.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Breastfeeding)

Prenatal and Post-Partum Depression

During 2007, 7.9% of Pregnancy Risk Assessment Monitoring System (PRAMS) respondents reported they had been diagnosed with depression during their pregnancy. This represents a 16% increase from the 2006 rate of 9.4%. Approximately half (52.0%) of the women who were diagnosed with depression were taking prescription medications for their depression, and more than two-thirds (77.0%) were provided with information about the risks and benefits of taking these medications during pregnancy. Additionally, 63.6% of the women who were diagnosed with depression reported they had received counseling for their depression.

- Women were more likely to have a hard time during pregnancy if their pregnancy was unintended (33.6%), their household income was <$10,000 (32.2%), they had a low birth weight infant (30.6%), they were single (26.9%), they had public insurance (24.4%), or they were aged less than 20 (23.4%).

(Source: Rhode Island Department of Health PRAMS data)

Pregnancy and Tobacco Use

According to the Rhode Island Department of Health, Maternal and Child Health Database, women who smoked during pregnancy were more likely to have a low birth weight and/or preterm baby compared to women who did not smoke during pregnancy. According to 2007 data, the rate of tobacco use during pregnancy among Rhode Island women rose to 11.2% from 10.6% in 2006. Since 1990, the rate of tobacco use during pregnancy among Rhode Islanders (22.5%) declined by 52.9% and by 27.4% since 2000 (14.6%).

- Additionally, between 2006 and 2007, rates of low birth weight and prematurity rose among women who smoked during pregnancy compared to women who did not smoke. During 2007, women who smoked during pregnancy were nearly twice as likely to have a low birth weight baby (13.8%) compared to women who did not smoke (7.1%).
- In 2007, women aged 20-24 (18.0%) and teens aged 15-19 (17.4%) continue to have the highest rates of tobacco use during pregnancy, while women aged 35-39 (5.3%) and 40-44 (6.5%) had the lowest rates. Native Americans continue to have the highest rates of tobacco use during pregnancy (24.7%), although the rate represents a decrease from 2006 (29.9%). The rates among Whites (11.5%) and Black/African Americans (11.0%) continue to be high and also represent increases from 2006 (10.8% and 9.5%, respectively).

(Source: Rhode Island Department of Health Maternal and Child Health Database)

Additional Resources

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Early Childhood (0-4 years)

Maternal and Child Health Facts

The Rhode Island Department of Health

Access and Utilization

Children and Screening

Universal newborn screening is the practice of testing every newborn for metabolic, genetic, hearing, and developmental risk factors, which, if left undetected, place a child at risk for serious health consequences or death. A baby is determined to be at risk, or risk positive, if they have any one of the following criteria: a known established condition; hearing loss; birth weight less than 1,500 grams; a neonatal intensive care unit (NICU) hospitalization greater than 48 hours; or the mother is Hepatitis B Surface Antigen (HBSG) positive. A baby may also be determined to be at risk if they meet at least two of the following criteria: mother's age is less than nineteen or greater than 37; mother's and/or father's education is less than 11th grade; mother is not married; no previous live births; five previous live births; presence of at least one family history risk factor; number of prenatal visits before 36 weeks is less than 6 or total number of prenatal visits is less than 10; no prenatal care visits before the fifth month; gestational age is less than 37 weeks and birth weight is between 1,500 and 2,500 grams; APGAR scores are less than 7 at one and five minutes.

- According to the Rhode Island Department of Health Newborn Developmental Risk Screening Program Database, newborns screened and considered at-risk increased from 6,768 in 2003, to nearly 7,300 in 2007. More than half of all babies born in Rhode Island are determined to be at risk for serious health or developmental factors.

- Babies born to families residing in the core cities were more likely determined to be risk positive than those residing in the rest of the state. Data from the Newborn Developmental Risk Screening Program indicate that among the 7,082 newborns identified as risk positive during 2008, 4,271 (60.3%) lived in the core cities. The proportion of babies born at risk is greater among the core cities (76.4%) than the rest of the state (46.1%). The percentage of newborns determined to be at risk varies within the core cities, ranging from 56.4% in West Warwick to 86.1% in Central Falls.

Children and Health Insurance

- Between 2006 and 2008, 7.0% of Rhode Island's children under age 18 were uninsured, compared to 10.8% of children in the U.S. Rhode Island ranks 14th in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents' employers.

- Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from 73.3% between 1999 and 2001 (an 8% decline).

(Source: 2009 Rhode Island KIDS COUNT)

Dental Care

- Nearly one-half of children in the U.S. do not receive dental care in accordance with the American Academy of Pediatric Dentistry's recommendations of two visits per year beginning at age one. The youngest children are the least likely to receive dental care.

- Nationally, the number of very young children with dental caries (cavities) in their primary teeth has increased. Between 1988 and 1994, 24% of children ages two to five had caries, compared with 28% between 1999 and 2004, an increase of 17%. More than half (51%) of children ages six to 11 had dental caries between 1999-2004, essentially the same as 1988-1994 (50%).

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Access to Dental Care)

Immunizations

Adequate immunization protects children against a number of infectious diseases that were once common and resulted in death or disability.

- Rhode Island's rate of fully immunized children ages 19 months to 35 months (75%) was lower than the national average (77%) in 2007, the first time Rhode Island's rate has been below the U.S. rate in a decade.

- In the U.S. in 2007, the 4:3:1:3:3:1 vaccination rate among children ages 19 months to 35 months was 79% for Asian children, 78% for White children, 78% for Hispanic children, and 75% for Black children.

- Poverty remains a risk factor for under-immunizations. In the U.S. in 2007, children living at or above the federal poverty level had a 78% immunization rate while children living below the poverty level had a 75% vaccination rate.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Childhood Immunizations)

WIC Enrollment

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) was created in response to a growing concern that low-income pregnant women, infants, and young children were not meeting nutritional guidelines. In 2005, WIC provided nutritious foods; nutrition education; referrals to health care and social services; and breastfeeding support to approximately 25,000 Rhode Islanders (5,750 women; 6,250 infants; 13,000 children) that meet categorical, income, and nutritional or medical risk eligibility criteria.

- On September 30, 2008, infants and children ages one through four comprised the majority of the population being served by WIC (77%). Women accounted for 23% (16% pregnant and 7% postpartum) of the population being served.

- In August 2008, 66% of WIC participants identified as White, 17% identified as Black or African American, 3% identified as Asian, and 14% identified as other races or multiple races. Thirty-six percent of WIC participants identified as Hispanic or Latino. Hispanics are also included in the racial groups above.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Women and Children Receiving WIC)

Mental Health Treatment and Prevention

Behavioral health problems affect children of all backgrounds. Children most at risk for mental health problems are those with prenatal exposure to alcohol, tobacco and other drugs; children born with low birth weight, difficult temperament or an inherited predisposition to a mental health problem; children living in poverty; those suffering abuse and neglect; children exposed to traumatic events; and children of parents with a mental health disorder.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children's Mental Health)

Health Status

Childhood Lead Poisoning

Lead poisoning is a preventable childhood disease. Infants, toddlers and preschool-age children are most susceptible to the toxic effects of lead because they absorb lead more readily than adults and have inherent vulnerability due to developing central nervous systems. Lead exposure can cause irreversible damage including loss of intelligence, impaired cognitive, motor, and physical abilities and behavioral problems.

- Between 1998 and 2010, all Rhode Island children entering kindergarten with a history of elevated blood lead level screening had a significant decrease from 24% to 5%. During the same period, elevated blood lead levels in the core cities have also steadily declined from 33% to 7%.
- In 2006, Rhode Island had the second highest percentage (among 34 comparable states) of children under the age of six with a confirmed elevated blood lead level. In 2006, the rate of lead poisoning for children under age six in Rhode Island was 2.4%, compared to 1.2% in the U.S. In Rhode Island in 2008, 487 children under age six had confirmed elevated blood lead levels (1.6% of those tested).

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children with Lead Poisoning)

Asthma

- Nationally, asthma is the most common chronic condition in children, the third-ranked cause of hospitalization for children under age 15 and one of the leading causes of school absences.
- In Rhode Island between 2003 and 2007, the rate of asthma hospitalizations for Black children was more than three times the rate of hospitalizations for White children and the rate for Hispanic children was more than twice the rate for White children. The rate of asthma hospitalizations among Black children has risen from 8.0 per 1,000 in 2000-2004 to 9.6 per 1,000 in 2003-2007 and the rate among Hispanic children in Rhode Island has increased from 4.9 per 1,000 in 2000-2004 to 6.4 per 1,000 in 2003-2007.

(*Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children with Asthma)*

Obesity

Obesity is associated with type II diabetes, hypertension, heart disease, and other acute and chronic health problems. Overweight children are susceptible to depression, negative self-image and low self-esteem that can lead to social isolation and high-risk behaviors.

- Over one in six (17.9%) Rhode Island children entering kindergarten during the 2007-2008 school year were obese, with a BMI at or greater than the 95th percentile.
- Thirty percent of Hispanic children entering kindergarten in Rhode Island during the 2007-2008 school year were obese, compared to 16% of their non-Hispanic peers.
- In the U.S., non-Hispanic White adolescents who live in families with lower incomes have a greater prevalence of being overweight than those who live in higher-income families. Income is not correlated with obesity for non-Hispanic Black or Mexican-American youth.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Overweight Children and Youth)

Diabetes

- Type 1 diabetes, where the body produces no insulin, is one of the most common chronic diseases in children. Nearly one child out of every 600 develops it. Children with type 1 need daily insulin shots to help their bodies use food. This type of diabetes usually peaks around puberty (10 to 12-year-old girls, and 12 to 14-year-old boys). Type 1 diabetes tends to run in families, and whites have a higher incidence of Type 1 diabetes than other racial groups.

(Source: Rhode Island Department of Health Diabetes Program)

KIDSNET—Health Information System

KIDSNET is Rhode Island's confidential, longitudinal, computerized child health information system. KIDSNET serves families, pediatric providers, and public health programs like the Immunization Program and WIC (Special Supplemental Nutrition Program for Women, Infants and Children). The purpose of KIDSNET is to help make sure that all children in Rhode Island are as healthy as possible by getting the right health screening and preventive care at the right time.

Looking at rates of preventive health services by demographic factors such as race, language spoken, residence, insurance, and other factors is extremely helpful in identifying disparities and in targeting outreach efforts. Programmatic databases usually indicate those children who have received a service, rather than those who have not. Furthermore, program databases usually do not contain much demographic data. KIDSNET links demographic data from the birth certificate and newborn developmental screening to preventive services provided. This allows comparisons of children who have received services with those who have not by demographic factors.

KIDSNET started collecting information from all births in Rhode Island on January 1, 1997. KIDSNET also obtains information about children born out of state if they see a Rhode Island participating doctor or receive services at a KIDSNET participating program.

- About 13,000 children are born in the state every year. As of April 2007, KIDSNET had information from 204,114 children in the system.

KIDSNET information comes from the following sources:

- Birth Records
- Pediatric Providers, Family Practice Doctors, and other Primary Care Practioners
- Children's Immunization Histories (including all states and foreign countries where the child had healthcare)
- Laboratory Reports from Newborn Bloodspot
- WIC (Special Supplemental Nutrition Program for Women, Infants and Children)
- Childhood Lead Poisoning Prevention Program
- Early Intervention
- Newborn Developmental Risk Assessment
- Rhode Island Hearing Assessment Program
- Family Outreach Program (home visiting)
- Birth Defects Program

KIDSNET website: ***www.health.ri.gov/family/kidsnet***

Additional Resources

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Middle Childhood (5-12 years)

Maternal and Child Health Facts

The Rhode Island Department of Health

Access and Utilization

Children and Health Insurance

- Between 2006 and 2008, 7.0% of Rhode Island's children under age 18 were uninsured, compared to 10.8% of children in the U.S. Rhode Island ranks 14th in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents' employers.

- Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from *73.3% between 1999 and 2001 (an 8% decline).*

(Source: Rhode Island KIDS COUNT analysis of Current Population Survey data, 2009.)

Immunizations

The 2007-2008 Rhode Island School Children Immunization Assessment (comprised of data collected directly from student health records) included an analysis of 2,917 randomly-selected records from students in kindergarten and 7th grade across 125 randomly selected schools. Immunization completion rates averaged 97% for kindergarteners and 89% for children in 7th grade. The rates reflect children's immunization status as of the date they entered kindergarten or 7th grade.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Childhood Immunizations)

Dental Care

Dental caries (tooth decay) is the most common disease among children five to 17 years old. Children with untreated dental problems are more likely to have problems chewing and swallowing, speech problems, and poor school performance due to difficulty concentrating and absenteeism.

- Minority children also have higher rates of tooth decay and untreated dental problems than White children. Hispanic children (19%) in the U.S. are more likely not to have had a dental visit in more than two years than non-Hispanic Black (15%) or non-Hispanic White children (14%).

- As of December 31, 2008, there were 38,428 Rhode Island children receiving Medical Assistance born on or after May 1, 2000 who were receiving dental benefits through the RIte Smiles program. There were 215 dental providers participating in the RIte Smiles program at the end of 2008, up from 90 when it began in September 2006. All children receiving Medical Assistance born before May 1, 2000 continue to receive dental benefits under the fee-for-service system.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Access to Dental Care)

Mental Health Treatment and Prevention

Mental health in childhood and adolescence is defined as the achievement of expected developmental, cognitive, social and emotional milestones and by secure attachments, satisfying social relationships and effective coping skills.

- One in five children ages nine to 17 in the U.S. has a diagnosable mental or addictive disorder; one in ten has a significant functional impairment. An estimated one-third of children who need mental health treatment do not get it.

- Children and adolescents receive a range of behavioral health treatment services at hospitals in Rhode Island, ranging from inpatient treatment at a psychiatric hospital or a general acute care hospital to outpatient treatment services. For example, Hasbro Children's Hospital, a division of Rhode Island Hospital, provided 7,555 outpatient psychiatry visits to 1,773 children and youth under age 19 in 2008.

- In 2007, there were 1,570 hospitalizations of children with a primary diagnosis of a mental disorder at the following hospitals: Bradley, Butler, Kent, Landmark, Newport, Memorial, Miriam, Rhode Island (including Hasbro Children's Hospital), Roger Williams, Saint Joseph, South County, and Westerly Hospitals.

- When a bed at a psychiatric hospital is not available, children and youth are "boarded" in the emergency department or on medical floors at acute care hospitals. These children and youth must wait for appropriate treatment and may require constant monitoring by staff so that they do not injure themselves or others. In 2008, 219 children between the ages of four and 17 years with a psychiatric diagnosis were "boarded" at Hasbro Children's Hospital due to the unavailability of an inpatient psychiatric bed in the state, up from 137 in 2007. The average period for which these young people were boarded in 2008 was two days.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children's Mental Health)

In a recent 2009 policy and practice brief published by the National Middle School Association, *Putting Middle Grade Students on the Graduation Path*, one of the major findings is that in high-poverty environments a student's middle grades experience strongly impacts the odds of graduating from high school.

According to the 2007 Rhode Island Youth Behavior Risk Assessment, data show that 7% of RI public middle school students report receiving mostly D & F grades. This represents about 2300 students statewide. Another 19% received mostly C's. Students in 8th grade vs. students in 6th grade, those who speak primarily non-English at home, and those with emotional or learning disabilities were more likely to report mostly Ds & Fs. Compared with students receiving high grades (mostly As & Bs) students receiving low grades (mostly Ds & Fs) were at greater risk for 25 of the 28 behaviors measured in the areas of seatbelt use, substance use, alcohol use, physical fighting, tobacco use, and violence. Prevalence rates among "C" students were generally between those with higher and lower academic achievement.

Homeless Youth and Families

Lack of affordable housing, unemployment, low-paying jobs, extreme poverty, and decreasing government supports all contribute to the problem of family homelessness. Other causes of family homelessness include domestic violence, the changing demographics of the family, the fraying of social support networks, mental illness, and substance abuse. Compared to their peers, homeless children are more likely to become ill, develop mental health issues (such as anxiety, depression, and withdrawal), experience significant educational disruption, and exhibit delinquent or aggressive behaviors. Homeless children go hungry at twice the rate of other children and are more likely to experience illnesses such as stomach problems, ear infections and asthma.

- In Rhode Island, 953 Rhode Island families received emergency shelter between July 1, 2007 and June 30, 2008, a 21% increase from the previous year. More than one in six (18%) of the children in these families had experienced homelessness before.

- In Rhode Island, it is likely that several forces contributed to increases in the number of homeless families. Between December 2007 and December 2008, Rhode Island's unemployment rate increased from 5.2% to 9.4%. At the same time, the average rent for a two bedroom apartment in Rhode Island increased by 8% and many families (both renters and owners) lost their homes to foreclosure. In 2008, 6,583 properties in Rhode Island were filed for foreclosure, up from 1,838 in 2007.

- In Rhode Island, 1,506 children under age 13 received emergency housing at homeless shelters and domestic violence shelters in 2008. Of these children, 895 (59%) were under the age of six.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Homeless Youth)

Health Status

Chronic Disease
Asthma

In Rhode Island, more than one in 10 (11%) children under age 18 reported having asthma between 2001 and 2005. Only four states report higher current asthma prevalence rates. Children ages five through 12 and adolescents ages 13-17 accounted for 28% of hospitalizations.

Asthma prevention and management are best handled in a primary care setting. Research shows that asthma care that is delivered in outpatient and emergency department settings is of lesser quality than that delivered through primary care. Rhode Island children with asthma who are racial and ethnic minorities, economically disadvantaged, uninsured or have other barriers to services must be able to access comprehensive and affordable primary medical care. This access will allow them to prevent and manage their chronic illness and avoid more costly and less effective treatment in other settings.

Nationally, asthma is the most common chronic condition in children, the third-ranked cause of hospitalization for children under age 15 and one of the leading causes of school absences.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children with Asthma)

Obesity

Obesity is associated with type II diabetes, hypertension, heart disease, and other acute and chronic health problems. Overweight children are susceptible to depression, negative self-image and low self-esteem that can lead to social isolation and high-risk behaviors.

During 2008-2009, nearly one in six (16.3%) of Rhode Island children entering kindergarten during the 2008-2009 school year were obese, with a BMI at or greater than the 95th percentile.

Hispanic children entering kindergarten in Rhode Island during the 2008-2009 school year were twice as likely to be obese (28.5%) than their non-Hispanic peers (14.2%).

During the 2008-2009 school year, nearly one in five (19%) 7th graders in Rhode Island were obese.

(Source: Rhode Island Department of Health Program Data)

Diabetes

Type 1 diabetes, where the body produces no insulin, is one of the most common chronic diseases in children. Nearly one child out of every 600 develops it. Children with type 1 need daily insulin shots to help their bodies use food. This type of diabetes usually peaks around puberty (10 to 12-year-old girls, and 12 to 14-year-old boys). Type 1 diabetes tends to run in families, and whites have a higher incidence of Type 1 diabetes than other racial groups.

Type 2 diabetes occurs when the body cannot make enough -- or can't properly use -- insulin. In the United States, Type 2 diabetes occurs in at least 90% of the population with diabetes. **Detecting type 2 diabetes in children** is hard because it can go undiagnosed for a long time since children can have mild or no symptoms, and blood tests are needed for diagnosis.

An increasing number of Americans are putting themselves at-risk for type 2 of diabetes because of the growing problem of obesity. Although this was once referred to as "adult onset", type 2 diabetes now affects both children/teens and adults. Reasons for this include a number of lifestyle changes such as drinking more sodas, skipping meals, eating larger portions, eating out more, and less physical activity (i.e. being driven to school than walking, exercising less).

(Source: Rhode Island Department of Health Diabetes Program)

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Adolescence (13-21 years)

Maternal and Child Health Facts

The Rhode Island Department of Health

Access and Utilization

Adolescent Well Care Visits

Although adolescence in general is a period of overall good health, it is also a period of high risk taking behavior. This paradox has created disparities within the health care system particularly among racial and ethnic minority adolescents (The National Academies, 2008). Adolescents have morbidity and mortality rates twice that of younger children (National Center for Health Statistics, 2007). In Rhode Island, adolescents aged 10-17 comprise 45% of the childhood population (RI KIDS COUNT, 2009). Health plans in Rhode Island report HEDIS measures including adolescent well child visits for their enrolled populations.

National research demonstrates that whether patients are privately insured, publicly insured or uninsured, reimbursement rates usually do not cover the full cost of care. Both private and public insurance programs are not structured to support integrated primary care services for adolescents. Adolescents are underserved in Medicaid because payment policies discourage preventive counseling. This information further underscores the need to support health insurance for adolescents as well as venues where adolescents can access care designed to address their developmental needs. Studies have demonstrated that providing health insurance in and of itself does not increase access to care for adolescents. Visionary and collaborative approaches can help ensure successful medical home models for adolescence to address their developmental needs

Adolescent Well Child Care HEDIS Data for Commercial and Medicaid Plans in RI	2006	2007	2008	2009
United HealthCare of New England	62.5%	58.3%	58.3 %	
Blue Cross Blue Shield of RI	58.7%	60.2%	61.7 %	
United HealthCare New England Medicaid	60.1%	61.3%	62.5 %	65.5 %
Blue Cross Blue Shield Medicaid		54.6%	55.9 %	58.4 %
Neighborhood Health Plan of RI		57.4%	59.1 %	63.8 %
National Commercial Benchmarks	57.8%	58.2%	59.6%	

Children and Health Insurance

- Between 2006 and 2008, 7.0% of Rhode Island's children under age 18 were uninsured, compared to 10.8% of children in the U.S. Rhode Island ranks 14th in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents' employers.

- Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from 73.3% between 1999 and 2001 (an 8% decline).

(Source: Rhode Island KIDS COUNT analysis of Current Population Survey data, 2009)

Dental Care

The federal Medicaid program mandates that states provide comprehensive dental services to eligible children up to age 21, including diagnostic and preventive services, treatment services, emergency services, and medically necessary orthodontic services.

- An average of 580 children under age 21 were treated for a dental related condition in Lifespan Emergency Departments (Rhode Island Hospital, Hasbro Children's Hospital, The Miriam Hospital and Newport Hospital) annually between Federal Fiscal Years 2004 and 2008. Three out of four (75%) of these children had private health or dental insurance, 9% had public insurance and 16% were uninsured. The total number of children treated for a dental related condition at Rhode Island Hospital has risen, from 421 in 2004 to 546 in 2008, a 30% increase.

- An average of 58 children under age 19 were hospitalized with a diagnosis that included an oral health condition each year between 2003 and 2007 in Rhode Island. On average, 13 children per year were hospitalized with an oral health condition as the main reason during this time period from 2003-2007.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Access to Dental Care)

Immunizations

To ensure that all high school seniors are fully vaccinated before beginning college or work, the Rhode Island Immunization Program runs *Vaccinate Before You Graduate (VBYG)* in high schools throughout the state. The program informs parents and students of the importance of immunization and holds vaccination clinics throughout the year at each participating school. The immunizations are funded by the state's Vaccines for Children program and are offered at no cost to students.

- During the 2007-2008 school year, 69 schools participated in VBYG. Of the 1,505 students enrolled in the program, 97% received one or more immunizations and 76% completed all immunizations for which they were enrolled. The shots administered included hepatitis B, MMR, Tdap, meningococcal, varicella (chicken pox), polio, influenza, and the human papillomavirus vaccine.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Childhood Immunizations)

Mental Health Treatment and Prevention

One in five children ages nine to 17 in Rhode Island and in the United States has a diagnosable mental health disorder, and one in ten has a mental health problem that is severe enough to substantially interfere with their functioning at home, in school, or in the community. Despite the high rates of mental health disorders among children, four out of five children do not receive needed treatment and those that do often receive treatment in a setting that does not best meet their needs or the needs of their families.

- Between 2006 and 2009 in Rhode Island, spending on psychiatric hospitalizations for children with health insurance through RIte Care or Medical Assistance decreased by 22%, from $22.6M to $17.6M. The spending per child hospitalized decreased by 32%, from $34,298 to $23,465, largely due to reductions in length of stay. Children with private insurance accounted for 58% (977) of the hospitalizations in 2008, while children with public insurance, such as RIte Care or fee-for-service Medicaid accounted for the remaining 42% (719).

(Source: 2010 Rhode Island KIDS COUNT Issue Brief: Children's Behavioral Health: Psychiatric Hospitalizations and the Continuum of Care)

- Children and adolescents receive a range of behavioral health treatment services at hospitals in Rhode Island, ranging from inpatient treatment at a psychiatric hospital or a general acute care hospital to outpatient treatment services. For example, Hasbro Children's Hospital, a division of Rhode Island Hospital, provided 7,555 outpatient psychiatry visits to 1,773 children and youth under age 19 in 2008.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children's Mental Health.)

- According to the Rhode Island Youth Risk Behavior Survey (YRBS), in 2007, 7% of public school students reported attempting suicide in the last 12 months. For students having a disability (physical, learning or emotional problems), 17% reported the same. 16% of high school students reported feeling sad or hopeless in the past 12 months compared with 41% of students reporting a disability. In the same survey, 31% of students who identified themselves as "gay, lesbian, bisexual or unsure" reported attempted suicide compared to 7% of heterosexual students. Additionally, 50% of students who were lesbian, gay, bisexual, or unsure reported feeling sad or hopeless compared with 21% of heterosexual students.

Homeless Adolescents

Studies of homeless youth have found that 40% to 60% of homeless youth have been physically abused, and 20% to 50% have been sexually abused in their homes. One study found that between 20% and 40% of homeless youth identify themselves as gay, lesbian, bisexual, or transgender, and many homeless youth are forced out of their homes by parents who disapprove of their sexual orientation.

- Between July 1, 2007 and June 30, 2008, 264 youths ages 13-17 entered the Rhode Island Emergency Shelter system accompanied by a parent or another adult.

- Rhode Island has a limited number of beds designated for runaway and unaccompanied homeless youth. Between October 1, 2007 and September 30, 2008, 15 unaccompanied youth received Basic Center services (up to 15 days of shelter) and seven received Transitional Living services (up to 18 months of housing and supportive services).

- As of December 31, 2008, there were 81 youth in the care of the Rhode Island Department of Children, Youth and Families who were classified as unauthorized absences/runaways.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Homeless Youth)

Health Practices and Behavior

Nutrition and Physical Activity

Nationally, the weekly recommended amount of physical education is 150 minutes in elementary school and 225 minutes in middle school and high school. Rhode Island state mandates are much lower than these amounts (health education and physical education totaling 100 minutes per week for children in grades one through 12). Four out of five (79%) Rhode Island high school students reported attending physical education classes on one or more days in an average week in 2007.

(Source: http://www.cdc.gov/obesity/stateprograms/index.html)

Tobacco Use

According to the 2007 Rhode Island Youth Risk Behavior Survey, the percentage of Rhode Island high school students who reported smoking cigarettes during at least 1 day during the previous 30 was 15.1%, compared to 20.0% nationally.

According to the Rhode Island School Accountability for Learning and Teaching (SALT) Student Survey, after an initial drop during the period between 1999/2000 through 2001/2002 (29%-23%) the percentage of high school students reporting smoking cigarettes in the previous 30 days have remained steady through 2007/2008. The percentage of middle school students reporting cigarette use in the previous 30 days went from 14%-8% after an initial drop during the same time period (1999/2000 through 2001/2002) and also remained steady through 2007/2008.

Substance Abuse

In 2007, approximately 8% of youth ages 12-17 in the U.S. met standard diagnostic criteria indicating the need for treatment for an alcohol and/or illicit drug use problem. Few of these youth received specialty treatment (6% of those needing treatment received specialty alcohol treatment and 10% received specialty illicit drug use treatment).

Nationally in 2006 and 2007, 26% of youth ages 12-20 reported obtaining alcohol for free from a non-relative aged 21 or over, 15% from another underage person, 6% from a parent or guardian, 9% from another relative aged 21 or older, and 4% reported taking it from their own home without permission.

Over the past decade, there has been a decline in reported use of alcohol and illegal drugs among Rhode Island middle school and high school students. In the 2007-2008 school year, as was the case in previous years, students in school districts in the core cities report lower use of alcohol, tobacco and cigarettes than do students in the remainder of the state.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Alcohol, Cigarette, and Drug Use Among Teens)

Condom Use

According to the 2007 Rhode Island Youth Risk Behavior Survey, the percentage of Rhode Island high school students (who are currently sexually active) who reported using a condom during the last time they had sexual intercourse was 34%, compared to 38.5% nationally.

Preferences of contraceptive choices can be seen among Title X-funded family planning agencies. In 2008, the preferred contraceptive methods among Title X clients were: oral contraceptives (21%), male condoms (15%), female sterilization (11%), abstinence (8%), injection (8%), IUD (6%), other methods (5%), hormonal patch (3%), ring (2%), fertility awareness (1%), vasectomy (1%), and sponge, Diaphragm, cervical cap, female condom, implant, or spermicide (0.5%). Of the 3,781 clients using no method, 60% were pregnant, 19% were seeking pregnancy, 6% were males relying on their female partner's method, and 15% cited some other reason for not using a method.

(Source: Rhode Island Department of Health Program Data)

Teen Dating Violence

According to the 2007 Rhode Island Youth Risk Behavior Survey, the number of youth who reported being hit, kicked, or slapped by a dating partner increased by more than 30% in the past two years alone. Teen dating violence affects youth from all socio-economic, racial, and ethnic groups; claims victims and per-predators of both genders; and occurs in heterosexual, gay, and lesbian relationships. The social, psycho-logical, and physical health repercussions are severe and persistent with a recent study linking dating violence to increased substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicide.

Health Status

Family Planning Services

The Family Planning Program provides affordable, confidential family planning and related preventive health services in accordance with nationally recognized standards where evidence exists that these services should lead to improvement in the overall health of individuals, with a priority for services to low-income individuals. The program expands access to a broad range of acceptable and effective family planning methods and related preventive health services that include HIV counseling, testing, and referral services and services for adolescents, including adolescent abstinence counseling.

- In 2008, the Family Planning Program served 2,677 adolescents less than 18 years of age. Of the 2,677 adolescents served, 73% were females and 24% were males. Twenty-one percent (21%) belonged to a racial minority group and 34% reported themselves as Latino. Seventy-four percent (87%) had incomes at or below 200% of the federal poverty level.

(Source: Rhode Island Department of Health Program Data)

Health Status

Late Initiation of or No Prenatal Care

Early prenatal care is important to identify and treat health problems and influence health behaviors that can compromise fetal development, infant health and maternal health. Women receiving late or no prenatal care are at increased risk of poor birth outcomes such as having babies who are stillborn, low birthweight or who die within the first year of life.

Pregnant adolescents in Rhode Island are the most likely to delay prenatal care. Between 2003 and 2007, one quarter (24.9%) of pregnant teens ages 19 and under received delayed prenatal care, compared with 10.9% of women ages 20 and over.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Women with Delayed Prenatal Care)

Births to Teens

The United States ranks number one in the industrialized world for teen pregnancy and birth rates. Teen pregnancy and parenting threaten the development of teen parents as well as their children. Once a teenager has a baby, she is at increased risk of having another as a teen. A repeat birth during the teen years compounds educational, economic and health problems for both the mothers and the children. Babies born to teen mothers are at increased risk for low birthweight, prematurity, and death in infancy. Children of teen parents are more likely to experience learning and behavior problems in school, live in poverty, enter the foster care system, drop out of high school, and spend time in prison.

- In 2007 in Rhode Island, there were 1,206 babies born to mothers under age 20, accounting for almost 10% of all babies born in the state. Rhode Island ranks 22nd in the U.S. for births to younger teens ages 15 to 17.

- Since the early 1990s, the teen birth rate for Rhode Island girls ages 15-19 has declined by 22%, mirroring the overall national trend. Between 1991 and 2005, the U.S. teen birth rate fell by 34%. However, U.S. teen birth rates rose by 3% in 2006.

- The decline in both teen pregnancy and birth rates has been attributed to improved use of contraception among those teens who are sexually active (accounting for 86% of the decline) and reduced sexual activity (accounting for 14% of the decline).

- Of all births to Rhode Island teens ages 15 to 19 between 2003 and 2007, 70% occurred in the core cities, the six communities with the highest child poverty rates.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Births to Teens)

Infant Mortality Rate (IMR) Among Adolescents

Infant mortality rate is also called the infant death rate. It is the number of deaths that occur in the first year of life for 1000 live births. IMR is an important measure of the well-being of infants, children, and pregnant women. Infant mortality is associated with a variety of factors, including health status of women, quality of and access to medical care, socio-economic conditions, and public health practices.

- The overall infant mortality rate in Rhode Island for 2003-2007 was 6.3 deaths per 1,000 births. The infant mortality rate was 58% higher in the core cities than in the remainder of the state.

- In Rhode Island between 2003 and 2007, the Black infant mortality rate was 12.1 deaths per 1,000 births, the Asian infant mortality rate was 6.6 per 1,000 births and the Native American infant mortality rate was 11.4 per 1,000 births. All minority groups had infant mortality rates greater than the rate for White infants (5.5 per 1,000 births). The Hispanic infant mortality rate was 8.3 per 1,000 births compared with 7.2 deaths per 1,000 births among non-Hispanic infants in Rhode Island.

- Pregnant adolescents in Rhode Island are the most likely to delay prenatal care. Between 2003 and 2007, one quarter (24.9%) of teens ages 19 and under received delayed prenatal care, compared with 10.9% of women ages 20 and over.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Infant Mortality)

Preterm Births

Women under age 20 and over age 35 have the highest preterm birth rates in Rhode Island. The rate of preterm births among women under age 20 between 2003 and 2007 was 13.6%. The preterm birth rate was 22.6% for 12-14 year olds, 15.1% for 15-17 year olds and 12.7% for 18-19 year olds.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Preterm Births)

Low Birth Weights

Nationally and in Rhode Island, the rate of low birthweight infant births is higher for women under the age of 20 than for older women and is particularly high for girls who give birth under age 15. Between 2003 and 2007 in Rhode Island, the percentage of low birthweight infants born to mothers under the age of 20 was 10.4%, compared to 7.9% for mothers age 20 and above.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Low Birthweight Infants)

Chronic Disease
Asthma

In Rhode Island, more than one in 10 (11%) children under age 18 reported having asthma between 2001 and 2005. Only four states report higher current asthma prevalence rates. Children ages 13-17 accounted for 20% of hospitalizations.

- Between 2003 and 2007, the rate of asthma hospitalizations for Black children (under 18 years old) in Rhode Island was more than three times the rate of hospitalizations for White children and the rate for Hispanic children was more than twice the rate for White children. The rate of asthma hospitalizations among Black children has risen from 8.0 per 1,000 in 2000-2004 to 9.6 per 1,000 in 2003-2007 and the rate among Hispanic children in Rhode Island has increased from 4.9 per 1,000 in 2000-2004 to 6.4 per 1,000 in 2003-2007.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children with Asthma)

Obesity

Adolescents who are overweight have a 70% chance of becoming overweight or obese adults, with increased health risks and higher health care costs than those at a healthy weight.

- The *2003 National Survey of Children's Health* indicated that 31% of Rhode Island children ages 6-17 were either overweight (15%) or obese (16%). In 2007, 11% of high school students were obese.

- In the U.S., non-Hispanic White adolescents who live in families with lower incomes have a greater prevalence of being overweight than those who live in higher-income families. Income is not correlated with obesity for non-Hispanic Black or Mexican-American youth.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Overweight Children and Youth)

Diabetes

According to the Centers for Disease Control and Prevention's diabetes statistics on children and adolescents in North America, those diagnosed with type 2 diabetes are generally between 10 and 19 years old, obese, insulin-resistant, have a strong family history for type 2 diabetes and Acanthosis Nigricans (a dark brown-looking, thick skin lesion that appears on the neck, underarm or groin area). All ethnic groups suffer from type 2, but American Indian youth have the highest prevalence in the U.S.

(Source: http://www.cdc.gov/diabetes/projects/cda2.htm)

HIV

Between January 1, 2000 and December 31, 2007, there were 1102 Rhode Island residents newly diagnosed with HIV and reported to the Rhode Island Department of Health. This number provides a minimum estimate of HIV infection, as it does not include those HIV infected individuals who have not been tested yet and those who get tested Anonymously. According to the Centers for Disease Control and Prevention (CDC) at the end of 2006, 448,871 people were living with AIDS and 1039,000-1185,000 people were living with HIV and AIDS in the United States. Based on this estimate the estimated number of people living with HIV and AIDS in Rhode Island in 2007 is between 3766-4295.

- Thirteen percent (141 out of 1101) of all the HIV cases diagnosed in Rhode Island in the period from January 1, 2000 to December 31, 2007 occurred in individuals 13 – 24 years of age. There has been a steady rise in the incidence of HIV among this age group in the past couple of years, with a slight decrease in 2005.

- Of the 141 cases diagnosed among youth in Rhode Island, 83 were males and 58 were females. Youth of racial and ethnic minorities were heavily impacted with 33% occurring in African American youth, 22% occurring in Hispanic youth and 44% occurring in White youth among the new cases in Rhode Island in 2007.

- Among Rhode Island males, Men who Have Sex with Men (66%) was the most common risk category followed by No specified Risk (22%). Among Rhode Island females, Heterosexual Contact (43%) was the most common risk category closely followed by No specified risk (42%).

(Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Additional Resources

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Special Health Care Needs/Disabilities

Maternal and Child Health Facts

The Rhode Island Department of Health

Children with special needs are those who have a chronic disease or disability that requires educational services, health care and/or related services of a type or amount beyond that required generally by children. Special needs can be physical, developmental, behavioral or emotional. Children with special needs are a heterogeneous group, varying by the type and severity of the chronic disease or disability. Some chronic and disabling conditions among children include mental retardation, autism spectrum disorders, hearing impairments, communication disorders, seizure disorders and congenital diseases.

Data from the 2005-2006 National Survey of Children with Special Health Care Needs (CSHCN) indicate that Rhode Island's prevalence rate of CSHCN increased from 14.1% to 17.2%. Based on these data, it is now estimated that approximately 41,783 children in Rhode Island have special health care needs. During 2006, Rhode Island had the 2nd highest rate of CSHCN among the 6 New England states and had the 6th highest rates among the 50 states and DC. All of the New England states had higher prevalence rates of CSHCN than the national rate (13.9%).

- Children with special needs often have multiple disabilities. One study found that 34% of children with special needs in Rhode Island had one disability, 34% had two disabilities and 33% had three or more disabilities.

(Source: Rhode Island Department of Health Program Data; 2005-2006 National Survey of Children with Special Health Care Needs)

Access and Utilization

Health Insurance and Usual Source of Care

According to the 2005-2006 National Survey of CSHCN, 6.2% of Rhode Island families with CSHCN reported they had no health insurance for their child compared with 8.8% of CSHCN families in the nation. A lower percentage of Rhode Island families reported their insurance benefits sometimes or never met their child's needs (7.0%) than families in the nation (12.7%). More than one in four (26.8%) families of CSHCN in Rhode Island reported their insurance is inadequate compared to 33.1% of families in the nation.

Medical Home

The needs of children with special needs are best met through a medical home, which can provide care that is comprehensive, coordinated, continuous, accessible and family centered.

Data from the 2005-2006 National Survey of CSHCN indicate that 50.9% of Rhode Island CSHCN received coordinated, ongoing, comprehensive care within a medical home. This reflects a decrease from the figure of 53.9% reported in the 2001 survey of CSHCN.

- Although 90.8% of all children had received a preventive health care visit in the past year, CSHCN were more likely to have had a preventive visit (94.5%) compared to 89.8% of children without special health care needs.

- In Rhode Island, 30.1% families of CSHCN reported they were without family-centered care; 16.6% had doctors who never or sometimes spent enough time with their child; 8.4% had doctors who never or sometimes listen carefully; 15.4% had doctors who never or sometimes provide enough information; and 9.0% had doctors who never or sometimes are sensitive to their family's values.

(Source: Rhode Island Department of Health Program Data; 2005-2006 National Survey of Children with Special Health Care Needs)

Early Intervention (EI)

The number of children, aged birth to three, enrolled in the Rhode Island Early Intervention (EI) Program has continued to rise. During 2008, 3,649 children aged less than three were enrolled in the Rhode Island Early Intervention Program, representing 9.7% of all Rhode Island children aged less than three. This 2008 enrollment figure is a 33% increase from 2003, when 2,746 children were enrolled in the Early Intervention Program. Nearly two-thirds (63%) of children receiving Early Intervention services were male and just over one-third (37%) were female. Enrollment is nearly evenly distributed among children by age, with 30% ages birth to one year, 35% between ages one and two, 33% between ages two and three and 1% over age three.

- Among the 3,649 participants in the Early Intervention Program during 2008, nearly three quarters (74%) had a significant developmental delay, 19% had a single established condition, and 6% had multiple established conditions; no information was available for less than 1%. Children residing in the core cities represented 45% of the total number enrolled in Early Intervention.

- During 2008, 971 children were discharged from the Rhode Island Early Intervention Program upon reaching age three. Of these children, 66% were eligible for preschool special education, 17% were not eligible for preschool special education, and 11% did not have eligibility determined upon exiting the program. The remaining 5% moved out of state, were unreachable or were withdrawn by a parent or guardian.

- In Rhode Island during 2003-2007, 94% of birth defects cases were referred to home visiting programs and 84% of cases with chromosomal anomalies were referred to the Early Intervention Program through the newborn developmental risk screening process. Newborns with birth defects who were not referred to home visiting and/or early intervention via the Newborn Developmental Risk Screening Program were likely referred for services by other referral sources such as the WIC Program or a clinician.

(Source: Rhode Island Department of Health Program Data)

Identification of Babies at Risk: Newborn Developmental Risk Screening

A baby is determined to be at risk if they have any one of the following criteria: a known established condition; birth weight less than 1,500 grams; a neonatal intensive care unit (NICU) hospitalization greater than 48 hours; or the mother is Hepatitis B Surface Antigen (HBSG) positive. A baby may also be determined to be at risk if they meet at least two of the following criteria: mother's age is less than nineteen or greater than 37; mother's and/or father's education is less than 11th grade; mother is not married; no previous live births; five previous live births; presence of at least one family history risk factor; number of prenatal visits before 36 weeks is less than 6 <u>or</u> total number of prenatal visits is less than 10; no prenatal care visits before the fifth month; gestational age is greater than 37 weeks <u>and</u> birth weight is between 1,500 and 2,500 grams; APGAR scores are less than 7 at one and five minutes.

- Data from the Rhode Island Newborn Developmental Risk Screening Program indicate that the number and percentage of newborns to be at risk for developmental factors decreased slightly from 7,379 (61.4%) in 2007 to 7082 (60.6%) in 2008—or 6 out of 10 babies born.

Geographic Disparities

- Data from the Newborn Developmental Risk Screening Program indicate that among the 7,082 newborns identified at risk for developmental factors during 2008, 4,271 (60.3%) lived in the core cities. The proportion of babies born at risk is greater among the core cities (76.4%) than the rest of the state (46.1%). The percentage of newborns determined to be at risk varies within the core cities, ranging from 56.4% in West Warwick to 86.1% in Central Falls.

The Rhode Island Pediatric Practice Enhancement Project (PPEP) is serving more families of CSHCN. During 2005, 740 families received assistance from PPEP, and by 2008, this figure quadrupled to 3,209 families in 2008. Based on the estimated 41,783 CSHCN in RI, the percentage served by PPEP rose from 1.8% to 7.7%.

(Source: Rhode Island Department of Health Program Data)

Special Education

The number of children aged 3-21 with disabilities who receive special education services has continued to decrease. During the 2007-2008 academic year, 26,100 students (18%) in kindergarten through the 12th grade were enrolled in special education and another 2,866 preschool children received special education services, resulting in a total of 28,966 children who received special education. This represents a 7.6% decline from the 2005-2006 academic year when 31,362 children received special education.

- Among the 26,100 students who were enrolled in special education during 2007-2008, 10,944 (41.9%) had a learning disability, 4,731 (18.1%) had a speech disorder, 4,460 (17.1%) had a health impairment, 2,723 (10.4%) had an emotional disturbance, 1,271 (4.9%) had autism spectrum disorder, 1,026 (3.9%) had mental retardation, and 875 (3.3%) had some other disability. During 2007-2008, special education students were aged as follows: 38% (5-10), 33% (11-14), 27% (15-18), and 1% (19-21).

(Source: 2009 Rhode Island KIDS COUNT Factbook: Indicator: Children with Special Needs)

Medical Assistance Coverage for Children with Special Health Care Needs

Children and youth who are in the child welfare system are more likely to have special needs when compared to other children. These special needs may include behavioral and emotional problems, developmental delays, and serious health problems such as chronic illnesses and disabilities.

- Children and youth who meet certain disability criteria are eligible for Medicaid and/or cash assistance through the federal Supplemental Security Income (SSI) program. As of December 31, 2008, there were 5,226 Rhode Island children and youth under age 21 receiving Medical Assistance benefits because of their enrollment in SSI.

- As of December 31, 2008, 2,626 children in Rhode Island were enrolled in Medical Assistance due to their foster care status. Rhode Island youth who are in substitute care on their 18th birthday are provided with RIte Care health insurance coverage until their 21st birthday through the Post Foster Care Medical Assistance provision.

- Children who are adopted through the Rhode Island Department of Children, Youth and Families and have special needs may qualify for adoption subsidies, including Medical Assistance. As of December 31, 2008, 2,548 children were enrolled in Medical Assistance because of special needs adoptions.

(Source: Rhode Island Department of Health Program Data)

Impact of Caring for CSHCN on Families

- Data from the 2005-2006 National Survey of CSHCN find nearly half (47.2%) of the Rhode Island families care for their children with special health care needs at home. Many families with CSHCN have had financial problems (14.7%), have had to cut work hours (25.7%) or have had to stop working (10.2%).

- The impact of caring for a child with special health care needs on the family was further analyzed by income and insurance. Families with incomes below 200% of the federal poverty level or without insurance experience a stronger impact on their finances, employment and time than families at/above 200% of the federal poverty level or with insurance.

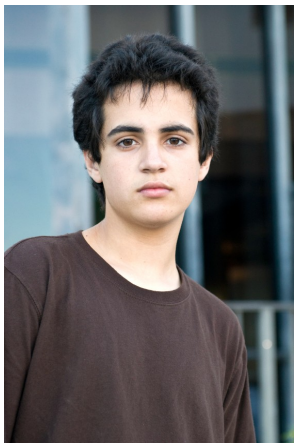
(Source: Rhode Island Department of Health Program Data; 2005-2006 National Survey of Children with Special Health Care Needs)

Health Status

Disability and Health Risks

According to the 2007 Rhode Island Youth Risk Behavior Survey (YRBS):

- 23% of students identified themselves as having a disability.
- Students with disabilities are more likely to smoke cigarettes, drink alcohol, and use marijuana before the age of 13. They are also more likely to continue these risky behaviors by currently smoking cigarettes, drinking alcohol, and using marijuana. Students with disabilities are more likely to report feelings of hopelessness and to consider and attempt suicide.
- Students with disabilities are more likely to be threatened, physically fight, be forced to have sex, and not go to school due to feeling unsafe. Students with disabilities are more likely to be overweight and get insufficient physical activity.



Children with Disabilities including Behavioral Health

Children with disabilities often receive a broad range of services that often include home and community-based services; behavioral health services; and/or hospital-based acute care services. Because their care needs are often very complex, many children with disabilities do not have community-based primary care providers, but rely on specialists for much of their primary care.

- Data from the 2003 National Survey of Children's Health indicate that: nearly one in seven (13.9%) Rhode Island children has asthma; 6.0% have/had frequent or severe headaches, including migraines; 4.7% have speech problems; 3.4% have bone, joint or muscle problems; 3.3% have a developmental delay or physical impairment; 2.8% have hearing or vision problems; 0.5% have autism; and 0.3% have diabetes. It should be noted that a child could have more than one of these conditions. The survey also found that 5.8% of parents would describe their child's health condition as severe.
- Additional survey data show that approximately one in ten (9.6%) Rhode Island children aged 3-17 had moderate or severe difficulties in the area of emotions, concentration, behavior or getting along with others. However, CSHCN were seven times more likely to have these difficulties (30.0%) than children without special health care needs (4.0%). Nearly one out of ten Rhode Island children (9.1%) received mental health care or counseling in the past year. The survey data also indicate that 7.4% of Rhode Island children have an emotional, developmental or behavioral problem for which treatment or counseling was needed. Specifically, 4.9% of respondents were told by a health professional that their child has behavioral or conduct problems and 7.0% have been diagnosed with depression or have anxiety problems.
- One out of ten children in Rhode Island (10.6%) has a learning disability and 8.7% have attention deficit disorder (ADD) or attention deficit hyperactive disorder (ADHD). Among the children with ADD or ADHD, 59.4% were taking medication for their condition. Approximately one-third, 30.1% of respondents reported that their child's mental and emotional health puts a burden on their family a great deal (7.9%) or a medium amount (22.2%).

(Source: Rhode Island Department of Health Program Data; 2005-2006 National Survey of Children with Special Health Care Needs)

Autism

More children in Rhode Island and nationally are being diagnosed with autism, which is a neurological disorder that affect's a child's ability to communicate, process and respond to sensory information, and form social relationships. Those diagnosed with Autism Spectrum Disorders (ASDs) have a range of symptoms and abilities and experience challenges that range widely in severity.

- During the 2007-2008 academic year, the number of Rhode Island children aged 3-21 with autism continued to increase and rose to 1,472, representing a 15.9% increase from 2007, when there were 1,270 special education students with autism.

(Source: 2009 Rhode Island KIDS COUNT Factbook)

Adolescent Transition and Transfer to Adult Healthcare

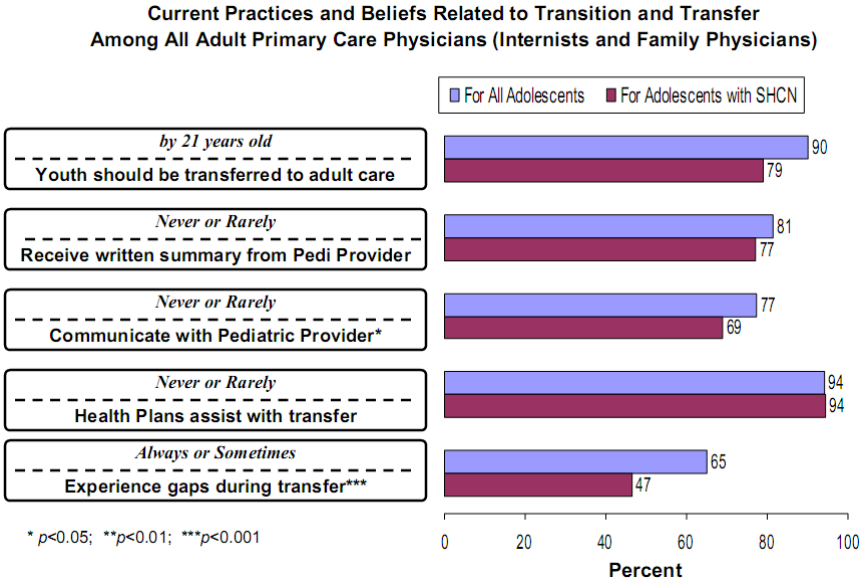
Healthcare Transition, the process of change from child and family-centered healthcare to adult healthcare, is a critical part of the Medical Home concept. The goal of this transition for young adults with special healthcare needs is "to maximize lifelong functioning and potential through the provision of high-quality, developmentally appropriate healthcare services that continue uninterrupted as the individual moves from adolescence to adulthood."

(Source: American Academy of Pediatrics, American Academy of Family Physicians, and American College of Physicians-American Society of Internal Medicine. A consensus statement on health care transition of young adults with special health care needs. *Pediatrics* 2002; 110:1304-1306.)

- According to 2005/2006 National Survey of Children with Special Health Care Needs youth with special health care needs who receive the services necessary to make appropriate transitions to adult health care, work, and independence were 37.6% in Rhode Island compared to 41.2% nationally.

In 2006-2007, the Rhode Island Department of Health's Office of Special Healthcare Needs (OSHCN) conducted a series of pediatric and adult primary care surveys to understand and identify current policies, practices, beliefs, and service delivery gaps related to the transition and transfer of youth with special healthcare needs from pediatric care to adult primary care. According to the surveys:

- The entry of young adults into an adult primary care practice is typically initiated by family members or friends.
- The majority of respondents reported higher levels of comfort in treating young adults with obesity, hypertension, and diabetes in comparison to treating young adults with sickle cell, spina bifida, cystic fibrosis, neuromuscular disease, and young adults who are technology dependent. The family practice physicians who provide continued care reported significantly higher comfort levels in treating young adults with mental health conditions (67%), cardiac conditions (70%), Down syndrome (74%), mental retardation (78%), autism (59%), and paraplegia (70%). The internal medicine physicians reported a significantly higher level of comfort in treating technology dependent young adults (30%).
- 79% of the respondents reported that young adults with special healthcare needs should be transferred to adult primary care by age 21. 77% reported they never or rarely receive a written transfer summary from the pediatric healthcare provider for their patients with special healthcare needs. 69% reported they never or rarely communicate with the pediatric care providers who previously cared for their patient with special healthcare needs. 94% reported that health plans never or rarely assist with the transfer, and 47% reported that young adults with special healthcare needs in their practice always or sometimes experience gaps in care during the transfer from pediatric to adult care.



Additional Resources

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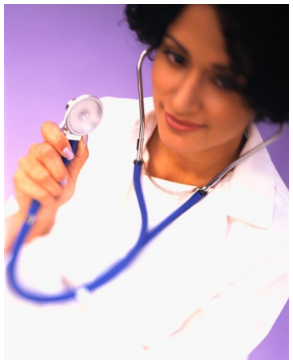
Women Through the Life Course

Maternal and Child Health Facts

The Rhode Island Department of Health

Access and Utilization



Family Planning Services

The Family Planning Program provides affordable, confidential family planning and related preventive health services in accordance with nationally recognized standards where evidence exists that these services should lead to improvement in the overall health of individuals, with a priority for services to low-income individuals. The program expands access to a broad range of acceptable and effective family planning methods and related preventive health services that include contraceptive methods, natural family planning, Level I infertility services, preconception counseling, pregnancy testing, breast and cervical cancer screening and prevention services, HIV/STD prevention education, HIV counseling, testing, and referral service, and services for adolescents (including abstinence counseling). The broad range of services provided does not include abortion as a method of family planning.

During the period 2004-2008, 38% of women who gave birth in Rhode Island reported that their pregnancies were unplanned, meaning that their pregnancies were wanted later or not at all. Ten percent (10%) of these women reported that they had difficulty accessing contraceptives prior to becoming pregnant. In 2006, Rhode Island served only 32% of the women in need for contraceptive services through sites that offer contraceptive services to the public and use public funds, including Medicaid. Rhode Island ranks lower than the nation as a whole (41.2%) and is the ninth worst of the 50 states. Rhode Island ranks lower than the five other New England states.

In 2006, Rhode Island spent $58 per woman in need of publicly funded contraceptive services. This includes all sources of public funding (Title X Family Planning Grant, Medicaid, Title V Maternal & Child Health Block Grant, Temporary Aid to Needy Families, and Social Services Block Grant). Rhode Island ranked lower than the nation as a whole ($106) and was the 16th worse state in the nation. Rhode Island ranked second worst of the five other New England states. In 2005, the estimated annual cost of family planning services, per women in need in Rhode Island was $159.

In 2007, there were 16,615 pregnancies among women aged 15-44 years. (74.2%) of these pregnancies resulted in live births, 22% in abortions, and 3.8% in spontaneous abortions. In 1997, the number of all births financed by Medicaid in Rhode Island was 5,657, or 47% of resident births. In 2006, Rhode Island had the fifth highest abortion rate in the nation, with 22 reported abortions per 1,000 women aged 15-44 years. The rate for the nation as a whole was 16 and Rhode Island ranked higher than the other New England states.

In 2009, the Family Planning Program served 22,791 individuals, 87% of whom were female. Nineteen percent (19%) were members of a racial minority group and 38% reported being Latino. Eighty-eight percent (88%) had incomes at or below 200% of the federal poverty level and 43% were uninsured for health care. In addition to providing affordable and effective contraceptives, the Family Planning Program provided 7,263 pap tests, 7,553 clinical breast examinations, 5,474 pregnancy tests, and 4,847 HIV tests in 2009.

(Source: Rhode Island Department of Health FPAR Data)

WIC Enrollment

- WIC is not an entitlement program and is not funded at a level that is sufficient to serve all eligible women, infants, and children. Rhode Island received $24.2 million dollars in federal funding for WIC during Federal Fiscal Year 2008.
- The statewide WIC participation rate increased from 71% in 2007 to 78% in 2008. Four of the six core cities – Central Falls (83%), Pawtucket (92%), Providence (83%) and Woonsocket (83%) – had WIC participation rates that exceeded the statewide participation rate of 78% in 2008. Newport (72%) and Pawtucket (66%) had participation rates below the state rate.

- In August 2008, 66% of WIC participants identified as White, 17% identified as Black or African American, 3% identified as Asian, and 14% identified as other races or multiple races. Thirty-six percent of WIC participants identified as Hispanic or Latino. Hispanics are also included in the racial groups above.

(Source: Rhode Island Department of Health WIC Program Data)

No Pap in Past 3 Years for Women 18+

In 2008, according to the Rhode Island Behavioral Risk Factor Surveillance System (BRFSS), the percent of women age 18 and older who report having had a pap smear within the last three years, 86.1% of Rhode Island women compared to the national average of 82.8%. National data from 2006, show highest rates of screening for black women (87.2%), followed by white (84.5%) and Hispanic (81.6%) women. Lowest rates are reported nationally for Asian/Pacific Islanders with 75.6% of women reporting having had a pap smear in the past three years. Data for Rhode Island women are higher than the national average for each group where data are available—Hispanic (90.5%), white (90.0%), and black (89.5%) women.

No Mammogram in the Past 2 Years for Women 40-64

In 2008, according to the Rhode Island Behavioral Risk Factor Surveillance System (BRFSS), the percent of women age 40 and older who report having had a mammogram within the last two years, 81.8% of Rhode Island women compared to the national average of 76.0%.

Health Practices and Behavior

Tobacco Use

The relationship between smoking and illness, particularly lung cancer, the leading cause of cancer mortality among women, is well documented. Smoking is more common among men than women, but takes an enormous toll on both sexes. High quantity and duration of smoking have been shown to have adverse effects on several health conditions, including cancer, heart disease, stroke, and respiratory illness. For women, there are strong negative effects on fertility and pregnancy.

According to 2004-2006 BRFSS, the percentage of all women in Rhode Island, age 18-64 who are current smokers is 25.4%. Looking at race and ethnicity separately, the highest rate of current smokers are among black women (28.5%), followed by white women (27.1%), all minority grouped together (18.2%), and lastly, Hispanic women (11.0%).

Physical Activity

According to 2007 BRFSS, only 50.5% of Rhode Island women reported having the CDC recommended level of weekly physical activity. The CDC recommends moderate-intensity activities in a usual week (i.e., brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate) for at least 30 minutes per day, at least 5 days per week; or vigorous-intensity activities in a usual week (i.e., running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate) for at least 20 minutes per day, at least 3 days per week or both. This can be accomplished through lifestyle activities (i.e., household, transportation, or leisure-time activities). The rate for RI women is slightly higher than the National rate for women of 47%.

Health Status

Chronic Diseases
Asthma

Rhode Island has a higher prevalence of asthma than the national average. However, adult asthma rates in Rhode Island have remained stable since 2000 with no significant differences from one year to the next. An estimated 83,448 Rhode Island adults aged 18 and older currently have asthma, about 10.1%of the state adult population, versus 8.4%nationally. (RI BRFSS, 2003–2007; US BRFSS, 2007)

- According to the Rhode Island Behavioral Risk Factor Surveillance System (RI BRFSS), 2003–2007, women have a higher prevalence of current asthma (12.9%) compared to men (6.9%).

Obesity

The proportion of adults who are overweight or obese has increased markedly in the past two decades, both nationally and in Rhode Island. These increases will likely lead to increases in obesity associated diseases. Overweight is defined as having a **body mass index (BMI**) of 25 or greater but less than 30; obesity is defined as having a BMI at or above 30.

- According to the Behavioral Risk Factor Surveillance System (BRFSS), in 2007 women in Rhode Island were less likely to be either overweight (29% vs. 30%) or obese (22% vs. 26%) compared to women nationally. White non-Hispanic women (20.7%) were significantly *less* likely to be obese than either Black non-Hispanic (37.5%) or Hispanic (29.0%) women.

- The prevalence of obesity was lower for women of higher education, and for women of higher income. Women who are college graduates reported the lowest obesity proportion (16.7%) while women with less than a high school education have the highest obesity proportion (32.4%). The proportion of obese women with household incomes of $75,000 or more is 18%, compared to 30.2% for women with annual household incomes less than $25,000.

(Source: 2007 Rhode Island Behavioral Risk Factor Surveillance System (BRFSS))

Diabetes

The adult diabetes population in Rhode Island closely resembles the nation's increasing trends. There has been a statistically significant upward trend in diabetes prevalence, from 5.4% in 1993 to 7.2% in 2007. This is a 33% increase in the number of Rhode Island adults with diabetes, from about 42,000 in 1993 to about 60,000 in 2007. The percentage of women reporting diabetes is slightly lower (7.0%) compared to men (8.0%).

Adding to this burden of diabetes, is the large number of individuals with pre-diabetes, a condition where individuals have blood glucose levels higher than normal, but not high enough to be classified as diabetes. Specifically, the Centers for Disease Prevention and Control has reported that 40.1% of adults in the United States aged 40-74 have been diagnosed with pre-diabetes. This pre-diabetic condition raises the risk of type 2 diabetes, heart disease, and stroke, which all intensifies the rising epidemic of diabetes.

- A high percentage of persons with diabetes report high blood pressure (67%), high cholesterol (61%), and/or indicators of cardiovascular disease (heart attack 16%, angina/coronary heart disease 17%, stroke 8%); 43% of persons with diabetes report being disabled; and, more than half (53%) of persons with diabetes have never taken a class on how to manage their diabetes and 68% have not attended a diabetes education session with a health professional within the past 6 months.

(Source: 2008 Rhode Island Department of Health Diabetes Health Profile)

Cancer

Differentials in cancer rates by gender are expected. They can be related to internal factors that differ between males and females, such as reproductive systems, or to external factors, such as historical lifestyle differences (i.e., occupational exposures to carcinogens, historical trends in smoking). In both Rhode Island and the national as a whole, the burden of cancer is higher among men than women. This disparity is largely attributable to cancers of the colon-rectum, lung-bronchus, and urinary bladder.

In recent years, cancer incidence has been lower among African American women than white women in Rhode Island, paralleling the nation's experience. In contrast to the nation, however, cancer mortality is also slightly lower among African American women than white women in Rhode Island.

The three leading cancers for females in Rhode Island by race are breast, lung & bronchus, and colon & rectum. Data from the RI Cancer Program from 2002-2006 show white women having consistently higher rates (per 100,000) than black women (breast—129 vs. 94; lung & bronchus—63 vs. 61; and, colon & rectum—46 vs. 42; respectively).

(Source: 2008 Rhode Island Department of Health Cancer Registry Surveillance Report)

HIV

Of the 1102 HIV cases diagnosed and reported to Rhode Island Department of Health from January 1, 2000 – December 31, 2007, females accounted for 28% of cases. Among Women, African Americans accounted for the majority of cases (39%), followed by Hispanics (28%) and Whites (28%) and the majority of the cases were from Providence county.

- The majority of cases were between the ages of 30 and 39 (40%) and 'heterosexual contact' is the leading mode of exposure (43% of cases), followed by 'No Risk Specified' (39%).

(Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Sexually Transmitted Infection Rates
Gonorrhea

There were 402 cases of gonorrhea reported in 2007. This represents a 21% decrease from the 508 cases reported in 2006. There has in fact been a steady decrease in the reported cases of gonorrhea since 2003, when a peak of 973 cases was reported. The increased use of sensitive nucleic acid amplification tests beginning in the late 1990's, along with increases in STD screening for females has lead to increased gonorrhea case finding, especially among the asymptomatic. This initially was reflected in a period when the number of reported gonorrhea cases in Rhode Island began to increase and reached a peak in 2003. In 2007, the incidence of gonorrhea for females was 169 (per 100,000) and 232 for males.

(Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Chlamydia

There were 3,177 cases of chlamydia reported to HEALTH in 2007. This represents a 2% increase from the 3,142 cases reported in 2006. Like in past years in Rhode Island, females accounted for approximately three-quarters of the chlamydia cases. The incidence rate for females was 2,282 (per 100,000) and 892 for males. The discrepancy between males and females is due to the routine practice of screening for chlamydia in females rather than the lack of infections in males. Treating partners (and hence preventing re-infection of females) remains a challenge.

The rates of chlamydia infection are higher among African American people than Hispanics and White, which is similar to the HIV infection and the gonorrhea distribution among the people of different race and ethnicity. This can be explained by the fact that the transmission of HIV and most of the sexually transmitted diseases involves engagement in similar high risk sexual activities. Unlike gonorrhea, where the discrepancy between African American gonorrhea rates and the other race/ethnicity gonorrhea rates has decreased, the discrepancy between African American chlamydia rates and the other race/ethnicity chlamydia rates has for the most part remained consistent.

(Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Infectious Syphilis

Rhode Island, like many other parts of the country, has seen an increase in reported cases of infectious syphilis. In 2006, Rhode Island's rate of primary and secondary syphilis ranked thirty fourth in the nation at 1.3 cases/100,000 population. This was after three straight years of Rhode Island being ranked in the top twenty states with the highest burden of disease. In 2007, the Rhode Island rate of primary and secondary syphilis increased again to 3.4 cases/100,000 people. The incidence rate for females was <5 (per 100,000) compared to 43 for males. There were 46 cases of infectious syphilis (primary, secondary and early latent stages) statewide in 2007, an increase of 130% over the 20 reported cases in 2006 and an 820% increase in infectious syphilis from the five reported cases in 2000.

(Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)

Mental Health

In recent years, there has been increasing recognition that self-reported measures of health status capture dimensions of quality of life and well-being. In 2007, according to the Behavioral Risk Factor Surveillance System (BRFSS) the number of days during the past month that Rhode Island women stated their mental health was "not good" was 39.5% compared to 37.8% women nationally. Overall, women in Rhode Island reported a higher number of days of poor mental health than men.

Additional Resources

For additional information about the materials presented in this, or any other data brief, please visit the Rhode Island Department of Health Website at:
www.health.ri.gov/

Or, to view the most recent publications from the Rhode Island Department of Health:
http://www.health.ri.gov/publications/

For additional information on any of the indicators presented in this, or any other data brief, as well as additional indicators, please visit Rhode Island KIDS COUNT at:
http://www.rikidscount.org/matriarch/default.asp

APPENDIX C:

Facilitator Guide, Needs Assessment Community Input Breakout Sessions
RI Health Department, 2010

Facilitator Guide

RI Health Department Needs Assessment Community Input Breakout Sessions
Marriott Hotel, March 2, 2010
Session I: 9-10am
Session II: 10:15-11:15am

The Rhode Island Department of Health recognizes that it has a significant role in creating policies that promote systems of care which are comprehensive, culturally competent, and effective and are based on best practices .The department seeks to develop systems of care that seek broad community input and promote efficient use of resources to achieve quality outcomes. In this forum, the department is focusing on priorities that will affect the health of women and children in RI across the lifespan.

I. Introduction of facilitator, and participants (name, organization only) **(5 minutes)**

II. Brief data overview by facilitator of data brief for population **(10 min)**

III. Main question we are asking today is: How can RI improve the health of _____population?" **(10 min)**

Prompts:

- We're looking for systems strategies, not program ideas.
- What good things are we doing that can be built on?

IV. Let's talk about… **(30 min)**

- **Access to services / Utilization**
- **Disparities**
- **Social Determinants**

Prompts:

- Let's talk about….
- How are we doing with…
- How could we best do that / work on that?
- What has your experience been around that?
- Are there certain specific populations / communities where more work needs to be done around that?

V. What are the top priorities for _____population in RI for improving systems of care toward better health of the population? **(5 minutes)**

THANK YOU!!

APPENDIX D:

Rhode Island Department of HEALTH
Maternal and Child Health Needs Assessment
Community Input Meeting

2010

Rhode Island Department of HEALTH
Maternal and Child Health Needs Assessment: Community Input Meeting
March 2, 2010

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V. What are the top priorities for _____population in RI for improving systems of care toward better health of the population? **(5 minutes)**

THANK YOU!!

Facilitator Schedule

SESSION	FACILITATOR	ROOM	HEALTH STAFF
1. Early Childhood	Leanne Barrett, RI KIDS COUNT	Reprisal	Blythe Berger, Mia Patriarca, Kristine Campagna
2. Middle Childhood*	Jill Beckwith, RI KIDS COUNT	Brittania	Kathy Marceau, Heidi Wallace
3. Adolescence	Bill White, JSI	Defiance	Tricia Washburn Rilwan Feyisitan
4. Children with Special Health Care Needs	Nancy Kasen, JSI	Repulic	Deborah Garneau, Lori Zelano
5. Pregnant Women	Jennifer Kawatu, JSI	Sessions	Carrie Bridges, Carol Hall Walker
6. Women Across the Lifespan*	Steve Meersman, JSI	Brittania	Cheryl LeClair, Mia Patriarca Kristine Campagna
* One Session Only			

Early Childhood: Breakout #1

- Parenting/family support and education (evidence-based, prevention, intervention).
    - Maternal depression.
- Contexts (employer support for working parents, teen parents, all types of parents).
    - Breastfeeding.
- Healthy, affordable food into low-income communities.
    - Education.
    - Physical activity/safe places to play.
- Immunization:
    - Find out why rates are decreasing.
    - Look at vaccine safety.

SIGNIFICANT KEYWORDS:

- Parental involvement/family engagement
- Social determinants: improved education, access to nutrition, safe spaces
- Supports for mothers: maternal depression; breastfeeding

Early Childhood: Breakout #2

- Parenting and family engagement.
- Pay attention to cultural context of families.
- Educate early about parenting—before you become a parent (prenatal care).

- Support all professionals who see young children.
    - Typical development of young children.
    - Support parenting and families.

- Sharing information through data systems—KIDS NET.

SIGNIFICANT KEYWORDS:

- Parental involvement/family engagement: all levels
- Education; for parents (about prenatal care, parenting)
- Support/coordination: for care providers and parents

Middle Childhood: Breakout #1

Improve Health of Children in Rhode Island—What's good in RI from which to build?

- No financial barriers for vaccines (universal state).
- Vision screening in school/school health resources.
- Dental screenings/molar express.
- Required lead screenings.
- DCYF Positive Educational Partnerships .
    - Behavioral health, education, and community.
- West Bay—12/14 sites.
    - PBIS positive behavior.
- Urban Corps Areas (Cranston, Central Falls, Providence, Pawtucket) expanded in E.I. and early childhood settings.
- Department of Health—launch program—behavioral health services.
    - 0-8 years screening.
    - 2 pilot programs.
- Health increase health of certified asthma educators.
- KIDSNET registry/immunization registry.
- Dental services in managed Medicaid.
    - 45,000 kids up to age 10.

What could we do better?

- Schools:
    - Data from schools as indicators.
    - Resources available to children.
    - Child/adult engagement.
    - "Lagging vs. leading."
    - Increase physical activities in gym classes.
    - Teach good habits in P.E.
    - Health vs. academics.
- Policies to implement:
    - Every year BMI established.
    - Co-relational analysis (where we are missing):
        - Mental health issues.
        - Behavioral health.
    - Special ed.
        - IEP/504 not reported accurately.
    - Use schools as full academic models and wrap-arounds (e.g. Bailey).
        - Interventions as district.
        - Mobile entity (risk and prevention).
- Data sets.
    - Advanced levels NECAP scores.
- Lack of coordination with what goes on between schools and home—parent engagement.
- Lack of equity for psychiatric hospitalist MD.

Concerns: Parents—most powerful predicator

- Behavioral Health:
    - Lack of after school programming.
    - Lack of healthy recreational activities.
    - Kids returning home to sedentary lifestyles.
    - Attack on intermediate of care that keeps kids out of psychiatric hospitals.
        - State has disassemble packages.
    - Access to child psychiatry.
        - Reimbursement rates problem.
        - Not many child psychiatrists in state.
    - Schools:
        - Need integrating programs for children and families.
        - Healthy neighborhoods.
- Dental:
    - Target poorer school for sealants and sealant programs.
    - Many children do not have average for sealants.

Community partnerships

- Target Obesity;
- Healthy resources;
- Access healthy snacks at hospitals, health centers, etc.
- Promote different messages.
- Food pantry—provide healthy meals.
- Census:
    - Not lump all children in one Hispanic category or African American categories.
    - Extrapolations/skews reports.
- School Based Health Centers
    - "Because He Lives Ministries" food pantry
- Parent involvement for healthy schools:
    - Asthma complications (English as 2nd language).
    - Home visits/environment/housing.
- Implement soda tax/sugar tax.
- Safe streets with sidewalks/create safe physical space.
- Standards for school meals.
- Lack of continuity throughout ages (e.g. teen suicide).

Early puberty for girls

- Services/SNT's involved.
- Teacher awareness.
- Early menstruation.
- Contributes to early puberty:
    - Lack of exercise.
    - Lack of healthy food.

Key Themes—community, school, parents integration.

1. School partnerships/integrations with school systems.
   - Broadening idea of what schools are/full service.
2. Asthma control plan—breathe easy at home.
   - Home visiting.
3. Education/bridging gaps.
4. Comprehensive approach with schools and school communities/parent engagement (beyond involvement).
5. Continuity through the ages, especially with mental health issues.
   - Communities include:
     - Community leagues.
     - Churches.
     - Schools.
     - Businesses.
   - Screening opportunities/registries/data systems: behavioral, dental, obesity, asthma.

SIGNIFICANT KEYWORDS:

- Vaccination: Universal State Success
- Screening of:
  - Vision
  - Dental
  - Lead
- Collaboration/partnerships
- KIDSNET
- Physical activity/education
- School as a place of public health interventions
- Coordination, lack of
- Parental involvement/family engagement
- Lifestyle → Sedentary
- Reimbursement
- Mental health lacking
- Community engagement
- Partnership with communities

Adolescence: Breakout #1

What are the most important issues affecting youth?

- Issues on perspective on what it is to be an adult / false sense of values around issues and perspectives (cell phones, body image, etc.).
- LBGT issues affecting adolescence: rates of suicide 4 to 5X higher than average.
- Psychotherapy: shortage of services, access to providers, psychotherapy needed with meds.
- Mental health delivery spectrum needs to be re-organized / not reaching care that they need and can be readily accessed.
- Parental consent with minors (parental consent).
- Cost cutting in-school health care.
    - School based health care/access: lack thereof.
- Adolescence: child does not equal to adult.
- Lack of services tailored to "young adults."
- Lack of social network for adolescence:
    - Schools not doing enough.
    - Not enough resources/health education immunization/nutrition.
    - Lack of "teen" voices/ peer groups /opinions /participations.
- No long-term planning to prepare adolescence to transition to adulthood.

- Only providing medical encounters:
    - Create access to medical care—i.e. reduce violence/safe space/healthy environment/substance abuse/obesity.
    - Preventative/intervention/wellness in school.
    - Health and wellness in school environment.
    - Change in systemic school system/education.
    - Train youth in policy/advocacy.
    - Invite DOE in force front.
    - Invite unions = collaboration between education and union = health and wellness.
    - Where family fits.
    - Bring in agencies/governmental/private/public.

- Bring parents involvement to health and wellness.
- Engagement with parents/youth through focus group/school/health centers.
- Consent forms that bring in parents' involvement.
- How services are paid for?
- Unable to find "preventative medicine."
- No financial model for prevent meds.
- Multi factor of health/fragmented funding.
- Need prevention health grants.
- Wellness intervention (broader sense)—i.e. teen suicide.
- Kids engaged in extracurricular prevents teen suicide.
- Health engaging in extracurricular activities and partners.
- Traditional medicine/health may not be appropriate for teens.
- How to reach kids?

    - Group visits.
    - Engaging workforce/schools/CBO's/community involvement.
    - More resources or people to drive the prevention strategies, "wellness coordinator"
- Teen social network
    - Need to figure out what/where/when teen socialized and connect with networks.
    - Raising teen leaders to be involved.

- Family Involvement: bring families into discussion around adolescence; make it a partnership; engage parents before crisis happens
- Juvenile justice is a factor: how do these kids rebound
- Preventive care not addressed with health care payers (BC/BS)
- Policy issues on how programs are funded mostly categorized / not integrated / time limited
- Pool money and look at all outcome measures that cut across whole child

Themes:

- Better access to mental health services; shortage of services available; mental health delivery system not reaching all those adolescents in need – system needs to be better organized
- Develop creative partnerships among HEALTH / Education / Workforce / DCYF / CBOs, and Youth
- Increase access to wellness and wellness based interventions; bring all adolescent populations together in thinking about wellness
- Increased money to better fund services for youth
- Social networking should be involved in communications message
- Often "competing" events across state to limit involvement and participation; alternative / more different ways to meet with youth

SIGNIFICANT KEYWORDS:

- Parental consent
- LGBT
- Lack of services
    - Social network
    - SBHC
    - Young adults
- Transition to adulthood lacks planning
- Education
- Prevention
- Access to care
- Collaboration
- Parental involvement/family engagement
- Reach young people – how?
- Social media/network as a tool for communications/outreach

Adolescence: Breakout #2

Areas / Health Care Systems / Services?

- Medical consent should be consistent with licensure; youth should be able to consent to caring for their own bodies; at 16 years old with medical providers.
- Core services follow issues identified by regions and increased rates of risk behaviors in certain areas.
- Special healthcare needs incorporate into mainstream.
- Confidentiality services; youth should have access to them.
- Meeting teens when/where/how they are – culturally, location, access issues, gender sexuality.
- Gender access to health/sexual issues.
- Develop community to mental health concerns: suicide, recognition, how to avoid failure (ie. Training school); destigmatize mental health
- Need to know how to identify mental health/agencies better for youth.
- No data on violence (bullying, cyber bullying).
- Teens: trigger factors—how to identify them?
- Social Media – power of connection, need more strategies on how to use effectively and also avoid problems associated with media (bulling, sexting, etc.)

Successful reaching teens

- Identify children at risk (in school/self referrals).
- Violence/substance/mental health prevention.

Identify triggers

- CBO's.
- Community services.
- Schools.

Program for Student Assistance (School Based Health Clinics)

- Successful program because:
    1. Working with teens/counseling (confidential).
    2. Collaborating with parents.
- Location of services.
- Empowering teens/mentoring programs with healthy adults.
- Treating teens to be responsible.
- Adolescence:
    - Reframing adolescence.
    - Putting adolescence in good light.
- Changing mindset of adults to treat adolescence as grown-up at 16. System should also recognize teen accountability.
- Education for teachers to deal with adolescence.
- System to allow adolescence to have accountability.
- Develop system with adolescence on effective decision making.
- Should teachers be nurturers?
- Change in environment/powering adolescence/schools/social change.

- Fragmented in dispersing information from public health and grassroots healthcare providers.
- No programs for special needs/no positive reinforcement for teens.
- Criminal justice system treats adolescence unjustly.
- System infused with bigotry.
- DOE and DOH should be collaborative – current partnership dysfunctional / CDC money went away.
- Bridging health and education for adolescence (including mental health)/DCYF.
- Union involvement in school.
- Loss of funding.
- Connecting health and education in more pronounced ways.
- No consistency or lack of capacity building for adolescence.
- Adolescence should be:
    - An asset.
    - Engaging in health and education.
    - Engage and being in family/union/creating system to improve the current situation/point of entry/needs/preventative health/holistic.
    - Grassroots participation in policy changes.

Themes:

- Adolescents should be consider considered an "asset" / change current perspective
- Understand ways to better work with adolescence and understand them in a positive way
- Health and education (DOH and DOE) need to work and develop programs in collaboration / DCYF needs to also be at the table
- Have more family involvement; better understand the context of family and unions
- Create a system to improve access and care for ALL adolescents (including special populations such as CSHCN)
- More clearly identifying a point of entry and have wrap around services for immediate and long term needs to prevention
- Address individual school dynamics; it needs to be a systems policy change / regs alone not successful / need community buy in and action
- Youth need to have a voice

SIGNIFICANT KEYWORDS:

- Collaboration
- Confidentiality/trust
- Enabling/empowering teens
- Education
- System, accountability of
- Funding, erosion of

Children with Special Healthcare Needs: Breakout #1

- Increase in early intervention.
- PPEP increase from 1.8% to 7.7%.
- 15.9% increase 3-21 year olds receiving special education services.
- Increase 14.1%-17.2%.
- Medical home: 3% decrease.
- Newborn screen: 60.6%, increase slightly.
- Special Ed enrollment.

Initial Thoughts

- Maintain the current gain.
- More specialist and coordination is happening with specialist and not primary care home.
    - Medical home may not be where child is receiving coordinating services.
    - More complex the child needs, the more the specialty services are coordinated care.
    - Also in mental health home.
    - Better way of navigating and educating how to coordinate services.
    - Better address linguistic and racial/ethnic factors.

1. Care coordination successful
    - PPEP—peer model: educate families.
    - Nurse coordinators: coordinate and teaching transition to independence.
    - For intervention: assigned a nurse, interpreter.
    - Insurance co. is a factor: case manager at the insurance co.
    - Look at relationship with care manager and care manager from ins. co.
    - Partnership between ins. co and provider.
    - Strategies with working with ins. co.
    - Peer resource workers and relationship with ins. co.
    - Pediatricians: refers to peer resource or medical staff.
    - How do parents find the pediatric offices: list of ped.

Improvements:

- Educate about 211 line.
- Go out to Cedars Centers.
- Newsletters.
    - Increase capacity of peer in specialist and other specialty areas.
    - RIPIN—resource center: hub for dealing with an array of issues.
        - Informal and formal collaborations need to be maintained and maybe fostered.

Informal and formal collaboration:

- Capacity of PPEP—education on peer model and expand capacity. Do not have enough providers. Education to primary and specialty physicians.
- How to sustain capacity with funding.
    - Enhance.
    - Strengthen.

- Certificate program.
    - Ex: Parent consult in ER to handle asthma issues.
- Sustain or strengthen peer models to help navigate system of care.
- Family moves in and out as needed.
    - Strategies to transition in and out the life.
- Reimbursement structure plays a role: cost.
- Many ins. do not cover mental health at the same rate.
- Change ins. providers because of change in med. insurance.
- Gaps in child mental health—hospital, community service: navigating network by payor and provider.
- Medical home:
    - Universal medical home record.
    - Electronic medical record.

Closing Remarks / Themes

- Mental health: insurance provider dictating type of care—medical necessity and ed. to insurance on the needs of families.
- Gap Kids: kids that are not sick enough: large number of families that cannot access services need care.
- Change in CEDAR—not counting each unit, save %, but will change the way services are delivered.
- Title V can build support.
- Global waiver: CSHCN.
- Quality as SSDI, not at level of care to require inst., recommended a buy-in option pyramid.
- Pediatric practices—incentive to do medical homes.
- Parent C. in a practice, but practice needs to change.
- Self assessment in practice, i.e. NCIQ Financial.

SIGNIFICANT KEYWORDS:

- Early intervention
- Medical home
- Special education
- Coordination of care
- Insurance/coverage
- Case management
- Education
- Communications
- Peer model

Children with Special Health Care Needs: Breakout #2

- 33% increase early intervention.
- Increase 1.8% to 7.7% PPEP.
- 16% increase 3-21 year olds receiving special education services.
- CSHCN increasing.
- Decrease comp. care 53.9%-53%.
- 7.5% decrease in ’05 = ‘07/’08 for special education care.

Success (models)

- Autism is treatable—DAN protocol, nutrition detox, recovered from autism.
    - Strategy: use DAN protocol.
- Cost shift:
    - Enrollment is from third party payors.
    - Help expansion of E.I.
    - Engage health ins. in expansion.
- Policy changes on what will be covered—EPSDT: develop screening up to age 3; over age 3, pre-authorization.
    - Medicaid and private ins.
- Could expand through policy through age increase education model/strategy.
- Pediatric dentistry program—expand P.C. program.
- Centralized training for parent con.
    - Build capacity.
    - CEDAR, DCYF initiative, cross system integration.
    - Therapeutic child care model.
        - Increase funding.
        - Buy-in outreach.
        - Network with other child care providers.

Low birth weight/prematurity babies

- Previous LBW babies—provide vitamins for 2nd pregnancy.
- Life course from prenatal period.
- Ed. and training (strategy).
- Equal access to Medicaid:
    - Gap kids (not Katie Beckett eligible) do not have comp. care health ins. or under-insured.
- Buy-in for families—working with policy/legislation include undocumented children.
    - Holding (private/public ins.) accountable (keeping them at the table).
    - How can we do this?
        - Every child—bring children to hospitals.
        - Moms/parents as vocal advocates.
            - Educate on ins. plan and completing applications.
        - Documentation provided to insurance: medical necessity.
        - Parent knows how to advocate.
        - Understand how system works.
        - Documented need is important.
        - Teaching how to navigate.

        - Health plans getting involved in community.
    - (Policy/legislation) and (Education—parents, providers, health ins. co.) and raising standards of care.

Effective strategies

- Partnerships—i.e. champions through case management that go out to community.
    - Gather info and bring back info to neighborhood and go back to the community to share.
    - Surveys/community forums—do they know how to advocate.
- Education needs to start at birth.
- Medical home, PPEP, special ed. advisory councils (parents can get info pre-K to 21).
- Gather leaders from advisory councils (Dept of Ed initiative).
- Instead of training people to access—simplify system.
    - How to create a user friendly system?
        - Finance system.
        - Systems are not linked—single point of entry, i.e. Utah/Mass.
        - Community based care—free up residential cost of care.
        - Earlier intervention will save $.
            - Standards for early intervention.
- Policy changes:
    - Legislative Changes—who can access care and how to access care.
    - DAN model.
    - Integrating community/resources.

SIGNIFICANT KEYWORDS:

- DAN protocol
- Insurance/coverage
- Policy expansion
- Education/training; for parents
- Access, including via Medicaid
- Insurance companies; keeping them accountable
- Documentation of HC system
- Knowledge of HC system
- "How to navigate"
- Collaboration/partnerships
- Community involvement
- Education
- System, simplification of

Pregnant Women: Breakout #1

What are we doing well?

- Providing health insurance and dental care to women during pregnancy.
- 84% of Medicaid and RiteCare patients get prenatal visit during 1st trimester.

Gaps/Problems

- Coverage for depression post partum; these women cannot be ignored because strongest predicator for post partum depression is a history of depression; though no one is looking for this.
- **Top tier problem:** Insufficient MH screening and treatment from pre-natal period through mothering is a "huge" issue for pregnant women—a big proportion of the problem pie.
    - Web of issues related to MH of mother, evidence-based interventions exist, could have domino effect positive/negative.
- **Taking a prenatal vitamin is a tier II problem:** Women think they need to wait to see MD at 12-13 weeks to get prescription for multivitamin including folic acid; women don't realize that OTC vitamin at Walmart is the same thing the MD would prescribe.
    - Consider a social media strategy to promote folic acid.
- **Preconception care and planning:** Very little going on pre-conceptually—no coverage for MD visit; ideally young people would have education about value of preconception care and healthy pregnancy and planning before getting pregnant.
    - Strategy would be a covered visit between 7th/8th grade.
- Young people are not getting comprehensive sex education.
- Culturally and linguistically appropriate care and training for providers is needed.
- Parents and educational system need to address sexual behavior earlier.
    - Most people described existing comprehensive sex education at a C or below.
    - This is really about parent/family engagement (incl. education) that is culturally and linguistically appropriate.
    - Need non-traditional partnerships to address this issue.
- Access to emergency contraception is a problem.
    - Women don't know they can get it; it's too expensive; age restriction; women don't have education about how to prevent pregnancy.

Major Themes:

- **Centralized, searchable information and referral clearinghouse/system, electronic and print.**
- Policies that don't inhibit intact families.
- **Increase length of time women can be out of work to deal with pregnancy complications.**
- Better way to communicate that coverage is available, especially to non-English speaking; e.g. many eligible for Rite Care are not enrolled.
- **Delays in being approved for services → delayed care (eligibility issues).**
- Presumptive eligibility backdated to beginning of pregnancy (eligibility issues).
- Increase support and funding for existing programs.
- Advocacy and home-based care management services for women post partum.

- Comprehensive care including mental health.
- Free, trained, supervised peer support for ≥ 1 year post partum.
- Regulate and insure home birth services.
- **Peer support including in-home.**
- **Comprehensive system to reduce isolation using evidence-based programs (linked with lots of things on this list).**
- **Comprehensive education to teach women how to advocate for their health, including comprehensive sex education and preconception care; better women's health education; education about health relationship.**
- Be intentional about bringing evidence-based programs to RI.
- Culturally and linguistically appropriate care (all).
- Medical home principles in OB/GYN community.

SIGNIFICANT KEYWORDS:

- Health insurance
- Dental care
- Post-partum depression/behavioral health
- Screening during pre-natal period
- Pre-natal care (vitamins/folic acid)
- Pre-conception/pre-pregnancy care
- Education strategy/sex education
- Cultural competency
- Parental involvement/family engagement
- Access to emergency contraception

Pregnant Women: Breakout #2

What are we doing well?

- Offering WIC to pregnant moms, promoting breastfeeding, reaching young/teen moms.
- New SNAP program.
- Breastfeeding rates and duration of breastfeeding increasing.
- Insure most women, don't insure documented women on student visas and therefore the children are also not considered RI residents—this is a policy issue and coverage gap that needs to be fixed.
- Existing coalitions supported by DOH; need to list these programs on DOH website but continuity of programs is a challenge:
    - Healthy Kids RI—education for teens.
    - Kangaroo Care.
    - Prematurity Task Force.

How can we improve the health of pregnant women in RI?

- After submitting an application to Medicaid, takes 30 full business days to get an approval.
    - Can provide minimal care during first trimester because can't get reimbursed but services that are delivered and not get billed to Medicaid do not get counted as 1st trimester care when care actually was provided.
    - Documentation/processing delays to getting on Medicaid is a huge problem—really breaks down; among providers in room, ~75% of women were uninsured when they got pregnant.
- Need better support for pregnant women and families.
    - Intact families are less eligible for public programs.
    - Need greater family involvement; fatherhood is seen as optional.
    - Employers don't support pregnant women because can't take time off for prenatal care or mental health visits.
    - Need extended family and social networks to support pregnant women and new moms.
    - There are some existing fathering and mom mentoring programs but need more bilingual mentors and better communication because providers so as to optimize services without duplication and link appropriate candidates to services.
    - Not enough financial support for women who need to work but can't due to prenatal complications.
    - Parental consent is a barrier for adolescents.
    - Fathers may be >20 y/o and therefore ineligible for services and girls are young teens.
    - Policies around age and family structure are a barrier (i.e. discouraging "intact" family).
- Programs come and go, which is very confusing for agencies, providers, and clients; also expectations for outcomes are unreasonable given time frame → DOH should state clear policies and commitments about the duration of funding for programs. DOH should fund programs for longer than one year for consistency.

- Centralized location to organize and present programs related to these populations, regardless of funding source, would be helpful to providers and increase communication.
- Medical home programs that offer peer support.
- Lack of collaboration among providers coupled with lack of support yields poor outcomes.
- Ending benefits at age 20 is too young and women are going through pregnancy and post natal services alone.
- Gap may be raising visibility (communications issue) about existing evidence-based programs like nurse family partnership and need to bring more evidence-based models into the state.

Major Themes:

- **Increase parental/family involvement.**
- Give young people the legal authority to govern their own care.
- A covered preconception visit—addressing risk: tobacco, folic acid, health relationships.
- **Increase access to MH services, esp. during and after pregnancy.**
- Increase access to tobacco cessation services.
- Greater access to substance abuse services; there are some but there needs to be more.
- **Comprehensive sex education in schools and for adults in community and 1:1 opportunities.**
- Better education for younger children including using social media and YouTube.
- **Culturally and linguistically appropriate services (necessary for all interventions).**
- Mentoring for at risk young women.

Facilitator Identified: Themes:

1. Increase parental/family involvement.
2. Comprehensive system to decrease isolation.
    - Compensate for decreased extended family involvement
    - Peer-to-peer support models.
    - Especially support after birth.
    - Use evidence-based programs that exist.
3. Early comprehensive health education.
4. Mental Health screening and support needed.
5. Reduce barriers to application and acceptance to RiteCare.
6. Increase access to knowledge about services—searchable information and referral information.

SIGNIFICANT KEYWORDS:

- Medicaid process/documentation and inefficiencies
- Distorted incentives for social programs
- <u>Parental involvement/family engagement</u>
- Employer policies re: pregnancy
- Social and family networks to support pregnancy
- Cultural competency
- Interpreters
- <u>Age and family structure present barrier for help</u>

- DOH coordination and communication or programs
- Medical home
- Collaboration; need for
- Insurance coverage
- WIC program
- Breastfeeding; promotion of

Women's Health across the Lifespan

How can RI improve the health of women through life course?

- Expand definition of women's health.
    - E.g. include outcomes related to heart disease, stroke, etc. across multiple discussions since it is vitally important to women's health
    - Understand/address impact of current economic recession on women's mental health, obesity, problems, mental health, etc.
    - Address impact of stress on women—balancing family/work, single moms—impact on illness, pregnancy.
    - Need to better understand the impact of lack of insurance on women's health.
    - Women in 20's and 30's → quality of their medical homes needs to improve

What needs to happen?

- Ensure that women are engaged in education—training and ed. that would allow women to support themselves.
- Focus on young girls—increase self esteem, sense of self worth, positive self image empowerment → prevention of risky behavior.
- Focus on schools as center of neighborhoods—engage mothers in schools → build healthy support systems at schools for moms.
- Increase social and community engagement in neighborhoods, in schools. Find creative ways to engage parents, creating "communities of change."
- Increase community involvement in planning.

Social determinants of health:

- Impact of living in poor neighborhoods w/ few resources on health? Need to consider these factors in developing strategies to improve women's health because of concentration of poverty and risk factors. Families members need to partner with schools, churches, community groups to create grassroots movements to improve education which in turn helps graduation rates, job opportunity, income potential, etc.
- Impact of new recommendations for screening on screening behaviors—increase understanding – New health screening recommendations seem to come out often enough to be confusing to general public. Medical community needs to be able to better communicate to patients, etc.
- Increase availability of culturally and linguistically competent SVCs.
- Transportation to health SVCs—barrier, adds complexity.
- Increase focus on education re: how to access birth control, how to prevent STDs, need comprehensive education and education on improving health starting at earlier ages in grade schools.
- Need after hours schedules, non-scheduled appointments—how to make care easy to obtain and more accessible.
- Increase outreach and education re: where services located, what's offered, capacity, eligibility, etc.
- People not moving enough during workday → need more support from employers to walk, eat a healthy lunch, take a stress break. More wellness programs supported by companies.

Disparities

- Women dually diagnosed with disabilities and mental health issues who become mothers. Most disliked by providers. Patients perceive disliked and don't go to appointments. Care seen as negative – better acuity of care.
- Need universal parent education: 101 parenting, esp. for women who have not come from ideal home life to help break dysfunctional behaviors, etc.
- Need to increase avail. of interpreters for patients who speak language other than most common and patient navigators. Need to increase availability of culturally comp. providers.

Major Themes:

- Engage parents and families in communities (in a culturally competent manner) whenever presenting health/wellness information.
- Increase reimbursement for family planning SVS under Medicaid / Waiver option—could double # of medical homes for low-income women.
- Expand family planning/contraception coverage to add approaches/types of contraception either underfunded or not currently funded.
- Increase school graduation rate and increase quantity of quality of health education at earlier ages / families need to partner with teachers / schools / communities to be advocates for children's graduation.

SIGNIFICANT KEYWORDS:

- Reimbursement
- Education
- Parental involvement/family engagement
- Education/training, esp. for women
- Young girls
- School as epicenter of community/neighborhood
- Community involvement
- Women's health
- Economy → Impact on women
- Insurance/coverage → Impact on women
- Social determinants
    - Collaboration across spectrum
    - Screening guidelines
    - Cultural competency
    - Transportation
    - Education
    - Outreach
    - Employer policies
- Education for mothers
- Interpreters; availability of

MAJOR THEMES THROUGHOUT THE NOTES AND TALLY

Note: The keywords and tally count below are approximated based on the number of instances in which the concepts are mentioned or discussed in the groups' notes. The keywords generally compass broad categories and may be broken into more specific sub-groups.

- Education and training: 16
- Collaboration, coordination, partnership: 12
- Parental involvement/family engagement: 10
- Health insurance and coverage: 7
- Community involvement: 6
- Medical home: 4
- Cultural competency: 3
- Reimbursement: 3
- Social determinants: 2
- Communications: 2

Themes for Breakout Sessions

Early Childhood: Breakout #1	Early Childhood: Breakout #2	Middle Childhood: Breakout#1 (Only One Session)	
Parental involvement/family engagement: support and education (example: maternal depression). Social determinants: improved education, access to nutrition, safe spaces & homes. Employer supports for mothers: maternal depression; breastfeeding.	Parental involvement/family engagement: all levels. Education (CLAS); for parents (about prenatal care, parenting). Support/coordination: for care providers and parents. Better data sharing.	Focus on community, school, parents integration. School partnerships/ integrations with school systems. • Broadening idea of what schools are/full service. Asthma control plan—breathe easy at home. • Home visiting. Education/bridging gaps. Comprehensive approach with schools and school communities/ parent engagement (beyond involvement). Continuity through the ages, especially with mental health issues. Communities include: • Community leagues. • Churches. • Schools. • Businesses. Screening opportunities /registries /data systems: behavioral, dental, obesity, asthma.	

Adolescence: Breakout #1	Adolescence: Breakout #2	Children with Special Health Care Needs: Breakout #1	Children with Special Health Care Needs: Breakout #2
Better access to mental health services; shortage of services available; mental health delivery system not reaching all those adolescents in need – system needs to be better organized. Develop creative partnerships among HEALTH / Education / Workforce / DCYF / CBOs, and Youth. Increase access to wellness and wellness based interventions; bring all adolescent populations together in thinking about wellness. Increased money to better fund services for youth. Social networking should be involved in communications message. Often "competing" events across state to limit involvement and participation; alternative / more different ways to meet with youth.	Adolescents should be consider considered an "asset" / change current perspective. Understand ways to better work with adolescence and understand them in a positive way. Health and education (DOH and DOE) need to work and develop programs in collaboration / DCYF needs to also be at the table. Have more family involvement; better understand the context of family and unions. Create a system to improve access and care for ALL adolescents (including special populations such as CSHCN). More clearly identifying a point of entry and have wrap around services for immediate and long term needs to prevention. Address individual school dynamics; it needs to be a systems policy change /	Mental health: insurance provider dictating type of care—medical necessity and education to insurance providers on the needs of families. Gap Kids: kids that are not sick enough: large number of families that cannot access services need care. Change in CEDAR—not counting each unit, save %, but will change the way services are delivered. Title V can build support. Global waiver: CSHCN. Quality as SSDI, not at level of care to require inst., recommend a buy-in option pyramid. Pediatric practices—incentive to do medical homes. Parent C. in a practice, but practice needs to change. Self assessment in practice, i.e. NCIQ Financial.	Partnerships—i.e. champions through case management that go out to community. • Gather info and bring back info to neighborhood and go back to the community to share. • Surveys/community forums—do they know how to advocate. Education needs to start at birth. Medical home, PPEP, special ed. advisory councils (parents can get info pre-K to 21). Gather leaders from advisory councils (Dept of Ed initiative). Instead of training people to access—simplify system. • How to create a user friendly system? • Finance system. • Systems are not linked—single point of entry, i.e. Utah/Mass. • Community based care—free up residential cost of care.

	regulations alone not successful / need community buy in and action. Youth need to have a voice.		Earlier intervention will save money. • Standards for early intervention. Policy changes: • Legislative Changes—who can access care and how to access care. • DAN model. • Integrating community/ resources.
Pregnant Women: Breakout #1	**Pregnant Women: Breakout #2**	**Women Across the Lifespan: Breakout #1 (Only One Session)**	
Centralized, searchable information and referral clearinghouse/ system, electronic and print. Increase length of time women can be out of work to deal with pregnancy complications. Delays in being approved for services → delayed care (eligibility issues). Peer support including in-home. Comprehensive system to reduce isolation using evidence-based programs (linked	Increase parental/family involvement. Increase access to MH services, esp. during and after pregnancy. Comprehensive sex education in schools and for adults in community and 1:1 opportunities. Culturally and linguistically appropriate services (necessary for all interventions).	Engage parents and families in communities (in a culturally competent manner) whenever presenting health/wellness information. Increase reimbursement for family planning SVS under Medicaid / Waiver option—could double # of medical homes for low-income women. Expand family planning/contraception coverage to add approaches/types of contraception either underfunded or not currently funded. Increase school graduation rate and	

with lots of things on this list). Comprehensive education to teach women how to advocate for their health, including comprehensive sex education and preconception care; better women's health education; education about health relationship.		increase quantity of quality of health education at earlier ages / families need to partner with teachers / schools / communities to be advocates for children's graduation.	

APPENDIX E:

Rhode Island Department of Health
2011 Title V Venture Capital Request (Budget Period 10/1/2010 – 9/30/2011)

Below is some information on the development of MCH priorities, the process of Venture Capital Requests (VCR's) and the guiding principles for submitting staffing positions, activities or projects.

The purpose of the Title V MCH Services Block Grant Program is to create Federal/State partnerships to develop service systems to meet MCH challenges which include the following:

● Significantly reducing infant mortality;
●Providing comprehensive care for women before, during and after pregnancy and childbirth;
●Providing preventive and primary care services for infants, children, and adolescents;
●Providing comprehensive care for children and adolescents with special health care needs;
●Immunizing all children;
●Reducing adolescent pregnancy;
●Preventing injury and violence;
●Putting into community practices national standards and guidelines for prenatal care, for healthy and safe child care, and for the health supervision of infants, children and adolescents;
●Assuring access to care for all mothers and children; and
●Meeting the nutritional and developmental needs of mothers, children and families.

In addition, Title V legislation requires that the State prepares a statewide needs assessment every five years. This year a full needs assessment is being submitted as part of the application. According to the MCH Block Grant Guidance, the needs assessment shall identify the need for:

● preventive and primary care services for pregnant women, mothers and infants up to age one;
● preventive and primary care services for children; and
● services for CSHCN

From the needs assessment, priorities are developed based on the needs identified and matches those needs to desired outcomes, required mandates, level of existing capacity and the political priorities within the State. From the results of this process, the State selects the most important areas in which the State believes it has a reasonable opportunity to maintain, modify, or enhance existing interventions, initiatives or systems that have been successful, or begin new interventions, initiatives or systems which are expected to result in needed improvements.

After the development of the priorities, activities and projects are identified to address the priority strengths and needs through the Venture Capital Request (VCR) process. The VCR's describes the activity or project and includes required MCH information on how the VCR aligns with one or more of the set priority or priorities, type of population and type of service data (budget requirements are listed below under the appropriate sections), how the VCR will be measured and does it align with the application process or measures.

In addition, VCR should reflect the four pillars of Community, Family Health and Equity's (CFHE) new approach for public health: health equity, the social and environmental determinants of health, the life course approach and integrations of programs. MCH Block grant resources will also be allocated based on the interventions from the health equity framework (see appropriate section below for documenting health equity intervention/s).

The VCR's are reviewed and the requestor is notified for any additional information if needed or if the VCR has been approved or denied. The required information mentioned above is explained in more detail, if needed, as part of the VCR below and all sections need to be completed in order for the request to be reviewed:

2011 Title V Venture Capital Request

Submitted By:
Project Name:

Request Type: ☐ New Request

☐ Request for Continuation Funding

If continuation funding, how many years has Title V supported this project?

1. **Project Description: (Please also include how this project is or will be integrated with other efforts/programs within CFHE, HEALTH, or with other State Agencies or Community level efforts/programs.)**

2. **Check the MCH State Priorities and/or National Performance Measures that the project addresses:**

MCH State Priorities

☐ Increase capacity and access to evidence based parent education and family support programs.

☐ Reduce tobacco initiation among middle school students.

☐ Increase the percentage of adolescents who have a preventive "well care" visit each year.

☐ Decrease the percentage of high school students with disabilities who report feeling sad or hopeless.

☐ Increase the percentage of woman who have a preventive care visit within the past year.

☐ Initiate prenatal home visiting program.

☐ Establish MOA with State Departments that support maternal and child health related efforts.

☐ Promote use of evidence-based programs to support parents and families.

☐ Adopt social determinants of health into public health practice

National Performance Measures

 The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.

 The percent of children with special health care needs age 0 to 18 whose families partner in decision-making at all levels and are satisfied with the services they receive. (CSHCN Survey)

 The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)

 The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)

 The percent of children with special health care needs age 0 to 18 whose families report the community-based service system are organized so they can use them easily. (CSHCN Survey)

 The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence. (CSHCN Survey)

 Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles,Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B.

 The rate of birth (per 1,000) for teenagers aged 15 through 17 years.

 Percent of third grade children who have received protective sealants on at least one permanent molar tooth.

 The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.

 The percent of mothers who breastfeed their infants at 6 months of age.

 Percentage of newborns who have been screened for hearing before hospital discharge.

 Percent of children without health insurance.

 Percentage of children, ages 2 to 5 years, receiving WIC services that have a Body Mass Index (BMI) at or above the 85th percentile.

 Percentage of women who smoke in the last three months of pregnancy

 The rate (per 100,000) of suicide deaths among youths 15-19.

 Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.

 Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.

3. Type of Service

Directions - Enter the %s that apply to each type of services. Make sure the end result in the columns is 100%. Please see MCH Pyramid below for explanation and examples for each type of service.

Type of Services				
I. Direct Services	II. Enabling Services	III. Population Based Services	IV. Infrastructure Building Services	Total % Services
				0.00%

The conceptual framework for the services of the Title V Maternal and Child Health Block Grant is envisioned as a pyramid with four tiers of services and levels of funding that provide comprehensive services for mothers and children. The pyramid also displays the uniqueness of the MCH Block Grant, which is the only Federal program that consistently provides services at all levels of the pyramid.

4. Type of Population

Directions - Enter the %s that apply to each type of population.* Make sure the end result in the columns is 100%.

Type of Population						
Pregnant Women	Infants < 1 year Old	Children 1 to 22 years old	Children with Special Care needs	Others	Administration	Total % population
						0.00%

***At least thirty (30%) of Federal Title V funds must be used for preventive and primary care services for children and at least thirty percent (30%) for services for CSHCN.**

When evaluating whether a program is directed at children with special health care needs, the following definitions and data should apply: Children and youth with special health care needs are defined as "those children and youth who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally" (American Academy of Pediatrics, 1998).

Prevalence Data: The rate of CSHCN in RI is 17.2% or an estimated 41,783 children between the ages of birth – 18 years old (National Survey of Children with Special Health Care Needs, 2006).

Prevalence of children birth-5 years	10.1
Prevalence of children 6 –11 years	20.0
Prevalence of children 12-17 years	20.7

5. Detail Relevant Community Input that led you to Proposed Project:

6. Equity Framework

Directions - Enter the %s that apply to each type of type of intervention. Make sure the end result in the columns is 100%. **Please see Equity Framework below for explanation and examples for each type of intervention.**

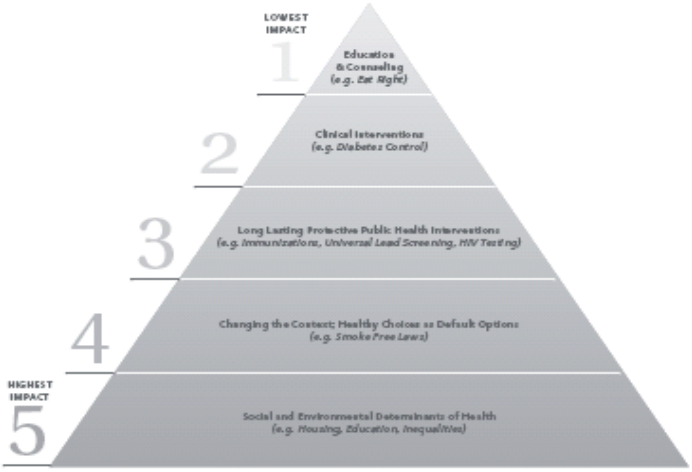
Equity Framework (Type of Intervention)					
Education	**Clinical Interventions**	**Long-lasting Protective Public Health Approach**	**Changing the Context: Making the Healthy Choices by Default**	**Social and Environmental Determinants of Health**	**Total % of Type of Intervention**
					0.00%

EQUITY FRAMEWORK: PRIORITIES

Equity, the social and environmental determinants of health, life course approach, and integration of programs are the four pillars of the CFHE's new approach to Public Health. When allocating resources and making decisions on what interventions should be implemented, CFHE uses the following tool to help prioritize its work.

The example below uses the Initiative for a Healthy Weight Program:

1. Education and Counseling: (targeting individual behaviors), e.g., encourage eating five servings of fruits and vegetables each day.
2. Clinical Interventions: e.g., outreach to medical providers to counsel their patients about diet.
3. Long-lasting Protective Public Health Approach: e.g., screening/collecting BMI for all kids at school.
4. Changing the Context; Making the Healthy Choices by Default: e.g., offering juice, not soda, in vending machines.
5. Social and Environmental Determinants of Health: e.g., ensuring access to affordable, healthy foods in neighborhoods affected by poverty.



This pyramid is adapted from Thomas Frieden, MD, MPH, presentation at the Weight of the Nation conference, in Washington D.C., July 27, 2009

7. What are the benchmarks for your project?

8.What are the outcome measures for the project? Are they aligned with any of the measures or indicators in the Title V application (state performance measures, national performance measures, health systems capacity indicators)?

9. Level of financial support requested:

Other Sources of Funding Supporting Project (Please include source (state, federal, restricted, other), account number and dollar amount):

10. Project Period

The budget time frame for Title V support is from Oct 1, 2010 through September 31, 2011. If the project is expected to extend the Title V grant period, please provide the timeframe for the project and the funds requested from 10/1/2010 – 9/31/2011 and from 10/1/2011 through the project end period.

11. How will you sustain this project after Title V support not available?

APPENDIX F:

Rhode Island: Overview of the "State of the State"

Rhode Island: Overview of the "State of the State"

Geographical & Cultural Characteristics

The state of Rhode Island is a small, coastal area (1,214 square miles) with just over one million residents (1,067,610). The entire state measures just 48 miles, from north to south, and 37 miles, from east to west. Historically, most Rhode Islanders have been White descendants of European immigrants, plus some long established African American families and members of the small Narragansett Native American Tribe.

With the establishment of the first water-powered cotton mill in the nation in Pawtucket in 1793, Rhode Island became the birthplace of the industrial revolution in the United States. Since then, waves of immigrants – from the Italians, Irish, French/French Canadians, and Portuguese in the late 19th century to the Asians and Latinos in the late 20th century – have come to Rhode Island in search of a better life.

Currently, 12.6% of Rhode Islanders are foreign-born, which ranks the state the 13th highest in the nation in this respect. Of the total foreign-born population in Rhode Island, 30.4% entered the state prior to 1980, 21.8% between 1980 and 1989, 24.7% between 1990 and 1999, and 23.1% in 2000 or later.

The largest share of the foreign-born population in Rhode Island is from Latin America (40.4%), followed by Europe (26.2%), Asia (15.3%), Africa (12.2%), and Northern America (5.5%). The top three counties of birth for Rhode Island's foreign-born residents are Portugal (14.1%), The Dominican Republic (13.5%), and Guatemala (9.3%). In 2005, 43.8% of the state's foreign-born residents were citizens.

The foreign-born make up 1.7% of young children in the state, 5.0% of youth, and 15.0% of working-age adults. Among people at least five years old living in Rhode Island in 2005, 20.4% spoke a language other than English at home. Of those speaking a language other than English at home, 48.7% spoke Spanish and 51.3% spoke some other language.

The three largest ancestral groups in Rhode Island are Italian, Irish, and French-Canadian. Rhode Island has a higher percentage of Italian Americans and persons of Portuguese ancestry, including Cape Verdeans, than any other state in the nation. Mainly due to large Irish, Italian, and French-Canadian immigration and, to a lesser extent, Portuguese, Puerto Rican, and Cape Verdean communities, Rhode Island has the highest percentage (63.6%) of Roman Catholics in the nation.

In 2006, there were 405,627 households in Rhode Island. The average household size was 2.5 people. Families make up 64.7% of the households in Rhode Island. This figure includes married-couple families (47%) and other families (17.7%). Rhode Island has the 7th lowest percentage of married-couple families living with their own children in the nation.

Although Rhode Island ranks high in percentage of forested land (60%), 75% of its population resides in a 40-mile long urban/suburban corridor along the shores of Narragansett Bay and in

the valleys of the Blackstone and Pawtuxet Rivers. This corridor, which includes Providence, contains nearly all of the state's public infrastructure, major transportation routes, and institutional and cultural centers. Providence, the second largest city in New England after Boston, is a major metropolitan community in which an estimated 170,435 residents live.

Providence is one of Rhode Island's six (6) designated "core" communities, defined as being a city or town in which more than 15% of the children live in poverty. Rhode Island's other core communities include Pawtucket, Central Falls, Newport, Woonsocket, and West Warwick. Thirty-four (34.2%) percent of the state's population resides in these six core communities, where 37.3% of children under six (6) years and 33.9% of children under eighteen (18) years live below poverty.

According to the U.S. Census, the racial/ethnic distribution of Rhode Island's population in 2006 consisted of Whites (82.6%), Blacks (5.1%), Asians (2.8%), Native Americans (0.4%), Native Hawaiian or Pacific Islander (0.02%), those who identified themselves as being some other race (6.9%) and those who identified themselves as being two or more races (2.2%). From 1990 to 2000, Rhode Island's non-Hispanic White population declined by 4%. During the same period, the state's Black population increased by 21%, Asians by 31% and Native Americans by 26%.

Blacks represent the largest racial minority group (and the second largest minority group) in the state. Rhode Island's Black population became increasingly diverse during the 1990s as a result of increased immigration from Haiti, Cape Verde, Liberia, and Nigeria. Rhode Island's Liberian population, conservatively estimated at 15,000, constitutes the largest per capitol Liberian population in the United States. In addition, 10% of the Black population in the state is Latino, a large majority of which came from the Dominican Republic.

The state's Asian population grew by 31% during the 1990s. Most Southeast Asians immigrated to Rhode Island from the war-torn countries of Vietnam, Cambodia, and Thailand during the 1970s and 1980s. From 1975-1979, well-educated professionals escaped from Cambodia and after a brief stay in Thai refugee camps, were resettled in the United States (including in Rhode Island) and Canada. From 1979-1985, Cambodians continued to resettle, and larger numbers of rural agrarian families arrived in the United States, including Rhode Island. According to the 2000 U.S. Census, Rhode Island's Cambodian refugee population is the 7th largest in the United States.

The Native American population grew by 26% during the 1990s, consisting primarily of members of the Narragansett Indian Tribe. Native Americans live in Providence, Narragansett, North Kingstown, and Charlestown. The Narragansett Reservation near Charlestown currently is about 2,500 acres in size and has a population of about 2,500 residents, however, the actual number of Native Americans living in Rhode Island remains very small (5,389).
However, more striking than any other trend was the surge in the number of Latinos in the state. Latinos saw their numbers double in Rhode Island in the 1990s from 45,572 to 90,820, a pace double that found in Massachusetts. In 2005, Latinos made up 10.9% (112,722) of the state's population (an increase of 24% since 2000). Thirty six percent (36%) of Rhode Island's Latinos are children. The majority of Latinos in Rhode Island (63.9%) come from Puerto Rico (28%), the Dominican Republic (19.7%), Guatemala (9.9%), and Columbia (6.3%).

Rhode Island's children are diverse in race, ethic background, language, and country of origin. In 2006, there were 9,848 foreign-born children under age 18 living in Rhode Island, representing 4% of the state's child population. In Rhode Island, 78% of children ages 5-17 speak only English, 14% of children speak Spanish, 6% speak other Indo-European languages, and 2% speak Asian or other Pacific Island languages.

Of Rhode Island's immigrant children, 42% are from Mexico, Central, or South America; 29% from the Caribbean; 11% are from Europe; 11% are from Africa; and 6% are from Asia. Minority and immigrant children and their families are highly concentrated in the six core cities in Rhode Island. More than half (58%) of children living in the state's core cities are minority children. More than three-quarters (78%) of all minority children live in these six communities. Rhode Island has the highest percentage of Hispanic children living in poverty (79%) and fourth largest percentage of black children (71%) living in neighborhoods in which more than 18% of persons are in poverty in the nation.

According to the US Census, after gaining small numbers of people from other states from 2001 to 2003, Rhode Island began experiencing decreases in its population in 2004, with an estimated net loss of 2,114 people. In 2005, the estimate was a net loss of 11,618, and in 2006, a net loss of 12,566. Rhode Island was one of only four states to see its population decrease in the US Census Bureau's annual estimates in 2006. The decline in Rhode Island's population is being driven by the migration of young, college-educated people looking for better job opportunities and more affordable housing in other states //2009.

State & Local Government Structure

Rhode Island has advantages for effective public health program implementation, given its small geographical size and unique governmental structure. With the exception of the state court system, there is no county level of government in Rhode Island. The state is made up of 39 cities and towns ranging from 1.3 to 64.8 square miles in size. In Rhode Island, local communities possess control in areas such as primary and secondary education, subdivision of land and zoning, and housing code enforcement. A combination of cultural, socio-economic, and transportation-related factors makes "the neighborhood" the most important level of community in many parts of Rhode Island, especially low-income communities.

In preparation for the State Fiscal Year 2011 budget, the Governor proclaimed that the impact on the recession on the State of Rhode Island has been severe, with over 73,500 Rhode Islanders unemployed. Through December 2009, Rhode Island had a net loss of 42,500 jobs from January 2007, the peak of employment in Rhode Island. The jobless rate peaked at 13.0% in September and the State currently ranks third in the nation with a 12.9% of unemployment as of December 2009. The State has depleted the resources it set aside to pay unemployment benefits and is now borrowing from the Federal Trust Fund to make benefit payments to unemployed Rhode Islanders. The impact of the high level of unemployment has translated into a sharp decline in tax receipts to the State, as less personal income taxes are received from employers through withholding taxes, and taxpayers transmit lower estimated and final payments, but request larger refunds. The recession has also affected housing and spending, which generate the state's second

largest source of income sales and use taxes. Public and private sector stakeholders are working to break this negative cycle and reverse the economic trend.

The Rhode Island Department of Health (HEALTH) is the sole public health authority that makes it legally responsible for the provision of core public health activities at both the state and local levels. HEALTH contracts with community-based organizations and professionals to provide nearly all direct preventive and public health services. The absence of local health authorities means that health care providers in the state look to the HEALTH for policy guidance and other forms of assistance. The state's Title V MCH Program is located in the HEALTH.

Economic Needs of the State's Population

In earlier generations, Rhode Island workers were well-paid and well-insured for health care through the presence of its strong manufacturing base. However, many manufacturing jobs were lost in recent decades, and in the 1990s, Rhode Island experienced its worst recession since the Great Depression, losing 11.6% of its total job base. By 1992, Rhode Island's unemployment rate, at 9.1%, was the 4th highest in the nation.

After weathering the financial storms that battered the state in the early 1990s, Rhode Island rode a wave of economic growth in mid-1990s. Taking advantage of a strong economy, the state was able to reduce taxes, increase state spending by double and triple the rate of inflation, and still realize $100 million end of year surpluses. When the national economy faltered in 2001, most states were hit a lot harder than Rhode Island. The restructuring of Rhode Island's economy during the 1990s has been proposed as one of the reasons for Rhode Island's resilience during this period.

However, on April 28, 2008, Economy.com (which is owned by Moody's Investor Services) and the international consulting firm Global Insight informed state officials participating in Rhode Island's annual Revenue & Caseload Estimating Conference that Rhode Island stands alone as the only Northeastern state "in recession" and that the state's employment figures, foreclosure rates, and personal income growth are worse than its New England neighbors and national averages. It was noted that the state is just one of nine states in recession – the next closest is Ohio. Rhode Island was the only New England state to report negative employment growth between March 2007 and March 2008.

The lack of affordable housing is a pressing problem in Rhode Island. A 2005 report by the National Low Income Housing Coalition found that Rhode Island faced a shortage of 11,000 housing units for residents earning 30 percent or less of the statewide median income, or $19,397 a year. Rhode Island ranks among the 10 least-affordable states in the country. Unfortunately, the state's affordable housing programs have been cut. The state's Neighborhood Opportunities Program — the seven-year-old fund that helps finance affordable housing for those who make less than $30,000 a year —was allotted $5 million of their $7.5-million budget for FY2009. An additional $26 million was cut from Rhode Island Housing Corporation's budget for FY2009

RI also has the highest mortgage delinquency rate in New England. Rhode Island foreclosure rates have been rising since the end of 2005. In 2008, according to Rhode Island Housing

Corporation data, of the nearly 3,000 properties in Rhode Island advertised for foreclosure during the 12-month period that ended March 31, 2008, 79% were in the cities and inner suburbs: Providence, Cranston, Johnston, East Providence and Warwick. Providence, with 1,543 foreclosure initiations, accounted for 52% of the total. Suburban and rural areas also experienced more foreclosures.

In Rhode Island, where house prices have increased ahead of growth in wages, 17% of households spent more than half their income on housing in 2005. Rhode Island is now one of 13 states – including Massachusetts, Connecticut, and New Hampshire – where more than half of all low-income households spend more than half of their income on housing. The disconnect between incomes and housing costs in Rhode Island is expected to persist into the next decade, as low-wage service jobs are added to company payrolls. Currently, a family with a household income of $51,814 (the median household income in 2006) cannot afford a median-priced, single-family home in any community in the state.

Educational Needs of the State's Population

According to RI Kids Count, the Rhode Island four-year graduation rate for the class of 2009 was 75%, the dropout rate was 14%, 5% of students completed their GEDs within four years of entering high school and 6% were still in school in the fall of 2009. Poverty is strongly linked to the likelihood of dropping out. Students in the core cities in Rhode Island are more than twice as likely to drop out of high school as students in the remainder of the state. Minority students also are more likely than White students to drop out of school. However, lower graduation rates in minority communities mainly are driven by higher poverty rates and lower rates of educational attainment among adults in the community. The Rhode Island four-year graduation rate for the class of 2009 was 71% for males and 80% for females.11 While female students have lower dropout rates than males, national data show that female dropouts are significantly more likely to be unemployed and earn less on average than male dropouts from the same racial and ethnic group.

Rhode Island's education accountability system is designed to promote an increase in educational outcomes so all students reach proficiency by 2014, as required by the federal No Child Left behind Act of 2001. Schools are classified by their performance on 37 indicators by the Rhode Island Department of Elementary and Secondary Education. Classification levels include: "Insufficient Progress," "Caution," "Met Adequate Yearly Progress (AYP)," and "Met AYP and Commended." In Rhode Island in 2009, 225 schools (76%) were classified as "Met Adequate Yearly Progress (AYP)," 16 additional schools (5%) were classified as "Met AYP and Commended," 12 schools (4%) were classified as "Caution," and 44 schools (15%) were classified as making "Insufficient Progress." Schools that do not miss any current targets are classified as "Met AYP." Schools that achieve exceptionally high performance in English or Mathematics for two years, make significant progress for two years or significantly closed achievement gaps between student groups are designated as Regents Commended Schools ("Met AYP and Commended"). Schools that miss up to three targets for the first time (other than school-wide English and mathematics targets) may be classified as "Caution" for one year only. Schools that miss a school-wide English or math target, more than three targets, or schools that miss any target for multiple years are classified as making "Insufficient Progress." Schools that are classified as making "Insufficient Progress" may face state interventions, including the implementation of a corrective action plan or restructuring by the state.

Until 2010, Rhode Island was the only State in the nation without a school funding formula. This year, the RI State Legislature passed and Governor Carcieri signed into law a statewide funding formula. The funding provides a base funding that follows the child and provides additional funding for children with special needs including health concerns and poverty levels.

In 2000, 78% of Rhode Island adults had a high school diploma. The proportion of residents age 25 and older with at least a high school diploma is the smallest among the six New England states, and the proportion with at least a four-year college degree is the second worst - ahead of only Maine**.** In 2006, Beacon Hill Institute gave Rhode Island a competitiveness ranking of 36th worst of 50 states on its "percent of population aged 25 years and above that graduated from high school." Currently, almost 44% of workers in the state have a high school degree or less.

According to the Rhode Island Economic Policy Council (RIPEC), an advisory panel made up of leaders in government, education, and business, the average level of education in the state is declining at the same time that the skills required by employers are rapidly increasing. Of Rhode Island's one million residents, 142,000 adults lack a high school diploma and 35,500 have limited English language skills. By 2010, the share of the workforce that has not graduated from high school is expected to increase in Rhode Island, while the percentage of workers who have graduated from college, including those with a graduate degree, will drop, according to data from the National Center for Public Policy and Higher Education.

According to the Nellie Mae Foundation, the percentage of young workers in Rhode Island holding a bachelor's degree or higher will drop by 3%-4% by 2020 since Blacks and Hispanics (the fastest growing demographic groups in the state) have not been making the gains necessary to compensate for the exodus of Whites. Further, nearly half of all new college enrollments in Rhode Island originate from out of state (more than any other New England state) and many of these students choose to leave the state when they graduate.

Social Service Needs of the State's Population

Economic forces and the educational needs of a community, coupled with the demographic and cultural characteristics of the population, impact the social service needs of individuals and families**.** In 2005, 12% of Rhode Island's population lived in poverty. Although this percentage is comparable with the percentage for the nation as a whole (13%), it is higher than every other state in New England.

In 2006, the proportion of children under age 18 as a proportion of the population in poverty in Rhode Island was 15.1%, which was lower than the nation (18.3%). Rhode Island ranked 17th in the nation and 5th in New England, whereas only 9% of White children in Rhode Island live in poverty, 36% of Black children, 36% of Hispanic children, and 14% of Asian children live in poverty.

The Family Independence Program (FIP) is the state's welfare reform program, as set forth in the Rhode Island Family Independence Act of 1996. FIP seeks to help low-income families by providing the supports (including subsidized health insurance, childcare, and work-readiness

activities) that families need in order to obtain and keep a job. Between 1996 and 2007, there was a 46% decline in the state's FIP caseload, from 18,428 cases to 9,993 cases.

As of December 2007, there were 6,242 adults and 17,808 children under the age of 18 enrolled in FIP. Three-quarters (74%) of all FIP beneficiaries were children under the age of 18. More than 2 in 5 (44%) children enrolled in FIP were under the age of six. In Rhode Island, 77% of the families enrolled in FIP have one or two children.

Rhode Island, under the childcare law (Starting Right), is the only state that has a legal entitlement to a childcare subsidy for income-eligible working families. Until 2007, working families with incomes up to 225% of the federal poverty level were entitled to a childcare subsidy for their children up to age fifteen. Co-payments were required for families with incomes over the federal poverty level. In 2007, eligibility for child-care subsidies was reduced from 225% of the FPL to 180% and the age eligibility was rolled back to age 12. Rates to providers have been frozen since 2004 at the 2002 market rate level. These changes resulted in the removal of 1,743 children from Starting Right in 2007. In 2007, the number of children receiving subsidies dropped to 9,008.

Currently, Rhode Island is the 5th least affordable state in a United States for a 4-year old in a child- care center. In Rhode Island, the average cost of full-time child-care for a preschooler consumes 45% of the median single parent family income and 10% of the median two-parent family income. Using the federal affordability guideline that families should spend no more that 10% of their gross income on childcare, a Rhode Island family would need to make at least $87,000 a year to afford the average cost of child-care for a 3-year old at a licensed center ($8,736).

The shortage of affordable apartments and increasing energy costs in the state is causing an increasing number of Rhode Islanders to seek shelter in the state's emergency shelter system. For the fifth year in a row, Rhode Island's emergency shelter system provided record nights of refuge to more people in 2006 (6,889 individuals) than the previous year. The number of families seeking shelter has increased 50% since 2000/2001. Eighteen percent (18%) of the 5,511 adults who entered the shelter system in 2006 entered as adults with families. Twenty-percent (20%) of the 6,889 individuals who entered the shelter system were children (1,378).

Health Care Needs of the State's Population

Rhode Island enjoys the second highest prenatal care rate (90.9%), the 4th lowest obesity rate (17%), the third lowest child death rate (15 per 100,000 children), the second lowest teen death rate (31 per 100,000 teens), the fifth lowest firearms death rate 5.1 per 100,000 population), the sixth lowest per capita rate of suicides (0.078 per 1,000 population) in the nation.

Unfortunately, it also has the third highest rate of cancer incidence (510.5 per 100,000 population) and the third highest homicide rate for victims aged 18-24 years (34.1%). Among people at least five years old in 2005, 16% reported a disability. The likelihood of having a disability varied by age – from 9% of people 5-20 years old, to 13% of people aged 21-64 years old, and to 39% of those 65 years and older.

Rhode Island filed and was granted a waiver for comprehensive Medicaid reform, which would set aside many traditional Medicaid requirements for up to five years, with the promise of substantial savings to help deal with the state's "structural deficit". Since much of the current MCH system is built on RIte Care plan services, and on targeted case management, many advocates and partners are worried about the "global waiver" plan. The RI Department of Health participates in governance groups related to the implementation of the Global Medicaid Waiver resulting in the expansions of EPSDT standards to include oral health, developmental and autism screening, and other provisions of Bright Futures 3.0. It is vital to keep up MCH data and input channels (KIDSNET, PRAMS, TWOS, etc) to monitor and manage impacts on vulnerable children and families.

Economic trends, and the educational and social services needs of a community, coupled with the demographic and cultural characteristics of the population, impact the health care needs of individuals and families. In 1979, 74.4% of working Rhode Islanders had employment-based health insurance. By 2003, only 57.1% of workers received coverage through private employers.

The state’s Medicaid managed care program, RIte Care, has had a profound impact on the state’s health care system. Three carriers participate in RIte Care. Neighborhood Health Plans of Rhode Island (NHPRI) has a market share of 59% and UHPNE controls 29%. The remainder of the market (12%) consists of BCBSRI through its Blue Chip Program. The majority of NHPRI’s clients access services through the state’s community health center network, while UHCNE and BCBSRI clients access services through private providers or hospital-based clinics.

According to RI Kids Count, between 2006 and 2008, 7.0% of Rhode Island’s children under age 18 were uninsured, compared to 10.8% of children in the U.S. Rhode Island ranks 14th best in the nation with 93.0% of children with health insurance, down from 2nd in 2002 and 2003. The majority of children in Rhode Island are covered by private health insurance, most of which is obtained through their parents’ employers. An estimated 4,983 uninsured children under age 19 live in Rhode Island families with incomes at or above 250% of the federal poverty level ($44,000 for a family of three in 2008), the limit for RIte Care eligibility. Between 2006 and 2008, approximately 72% (13,078) of the estimated 18,141 uninsured children in Rhode Island were eligible for RIte Care based on their family incomes but were not enrolled. Recent increases in the rate of uninsured children in Rhode Island can be partly attributed to the decline in employer-sponsored insurance. Between 2006 and 2008, 67.2% of children were covered by employer-sponsored health insurance (ESI), down from 73.3% between 1999 and 2001 (an 8% decline). The cost of health care coverage for families has increased faster than wages in every state over the past decade. Between 1999 and 2009, health care premiums in Rhode Island increased by 122%, compared with 38% wage growth.16 In 2008, the average annual cost for a family policy in Rhode Island was $13,363, compared with $12,298 in the U.S. Rhode Island’s RIte Share premium assistance program helps low-income families to afford the cost of employer-sponsored coverage. RIte Care provides coverage to children up to age 19 in families with incomes up to 250% of poverty. RIte Care also covers parents of eligible children in families with income up to 185% of poverty. RIte Care expanded eligibility to include pregnant women up to 350% of poverty and childcare providers who serve low-income children. As of December 31, 2007, 70% (77,054) of the RIte Care members who qualified based on family

income were children under age 19. There were 39,186 low-income parents enrolled in RIte Care as of December 31, 2007. Of these parents, 16% (6,242) received RIte Care because they were enrolled in the Family Independence Program (FIP).

In April of 2001, the Rhode Island Department of Human Services (HEALTHS) launched the RIte Share initiative as a way to control increasing costs associated with RIte Care and to strengthen the employer-sponsored health insurance infrastructure in the state. RIte Share requires RIte Care applicants with access to employer-sponsored insurance to participate in their employer's insurance plan. RIte Share pays the employee's share of the cost for enrolling in an approved employer-sponsored family or individual health insurance plan. Eligibility guidelines are the same as for RIte Care. RIte Share provides the full range of RIte Care benefits to families by covering RIte Care services not included in the employer's health insurance plan. As of December 31, 2009, 7,234 children and 3,143 parents (10,377 total) were enrolled in RIte Share**.**

Rhode Islanders with the highest un-insurance rates are young adults ages 18-34 years (18.5%), adult males ages 16-64 years (12.8%), adults living in families without children (12.6%), adults with family annual incomes less than $25,000 (23.1%), and unemployed adults (30.4%). However, the rise in un-insurance in 2003 compared to the previous year is seen primarily among young adults (a 10.1% increase), women (a 15.5% increase), families with children (a 5.8% increase), middle-income households (a 34% increase), and the employed (a 9.2% increase). Uninsured Rhode Islanders access services through the state’s CHC network and through hospital emergency rooms.

Over 40% of Rhode Island adolescents aged 12-21, with private health insurance, did not receive an annual preventive care visit. Although RI does better that the national benchmark of 59% for private health plans, the numbers indicate that adolescents are not receiving preventative services on a regular and consistent basis.

Rhode Island’s emergency room current utilization rates exceed the United States and Northeast averages by 4% and 9%, respectively. Based on these rates and the projected population, emergency room visits in Rhode Island will total 460,000, nearly 30,000 more emergency room visits as compared to 2000. As expected, young working age individuals (18-44 years), including the uninsured, comprise the largest population (44%) of these visits. In the absence of a state-supported hospital, all of the hospitals in the state are legally mandated to treat the uninsured.

With respect to mental and behavioral health needs of the state’s population, the rate of non-federal acute hospital discharges with a principal diagnosis of a mental disorder, including substance abuse (MD/SA), was substantially higher in Rhode Island (11.9 per 1,000 population) than nationally (7.7) in 2004. The total number of discharges with a principal or secondary diagnosis of MD/SA comprised more than one-quarter (27.7%) of all discharges (excluding newborns) from these facilities. This data indicates that hospitalizations of persons with a diagnosis of MD/SA comprise a large proportion of the inpatient care provided in Rhode Island’s hospitals. The majority of such patients have an MD/SA diagnosis secondary to a principal diagnosis of a physical illness or injury.

National Survey on Drug Abuse & Mental Health data (2004) seems to support that Rhode Islanders experience higher rates of substance abuse and serious psychological distress compared to other New England states. Rhode Island has the highest percentages of past year any illicit drug dependence or abuse (3.49%), past year cocaine use (3.52%), past year alcohol dependence or abuse (9.59%), and past year serious psychological distress (12.18%). It also had the highest percentages of individuals needing but not receiving treatment for illicit drug dependence or abuse (3.06%) or alcohol dependence and abuse (8.91%). Rhode Island also has the highest percentage of alcohol related traffic fatalities (50%), the second highest percentage of heavy drinkers (7.3%), the third highest percentage of binge drinkers (18.2%) in the nation.

In Rhode Island, private insurance rates for behavioral health services were reduced in the 1990s, and although rates for some services have been increased, many behavioral health services have yet to be adequately reimbursed. Public services have generally not been adequately funded to meet the needs presenting to the system.

Publicly funded mental health services for children in Rhode Island are provided by the state Department of Children, Youth, and Families (DCYF) through contracts with community-based organizations or through RIte Care. Mental health care for adults is provided by the state Department of Mental Health, Retardation, & Hospitals (MHRH) directly or through RIte Care. Low-income, uninsured individuals are dependent upon the state's community mental health system for services.

In 2006, the National Alliance on Mental Illness (NAMI) gave Rhode Island an overall grade of "C" with respect to its progress toward ensuring a proven, cost-effective mental health system, based on information from four information sources and scored from 39 specific criteria representing four categories: Infrastructure, Information Access, Services, and Recovery Supports. According to NAMI, Rhode Island's urgent mental health needs include: private sector provider rates and supply, alternatives to hospitalization, and Spanish language workforce development.

Dental insurance is not available to many working families in Rhode Island. Fewer than half (48%) of Rhode Island employers offer dental insurance to their full-time employees, and 14% offer it to there part-their employees. Despite this, the percentage of Rhode Islanders who had a dental visit within the past year was 78.5% in 2004, which ranked Rhode Island 4th highest among the 50 states. State law requires schools to provide dental screenings for all newly enrolled students, annually for children in grades K through 5, and at least once between grades 7-10.

In 2006, Medicaid reimbursement rates were raised for dental providers participating in the RIte Smiles Program. As a result, the number of dentists accepting qualifying children with Medical Assistance has more than tripled. Nearly half (49%) of children who were enrolled in RIte Care, Rite Share, or Medicaid fee-for-service during 2006 received a dental service during the year.

Fourteen percent (14%) of Rhode Island children under age 18 are estimated to have special health care needs. Currently, 23% of all households in Rhode Island have a child with at least one special health care need. A higher percentage of children in low-income families in Rhode

Island have special health care needs compared to those in the United States, with 16% of Rhode Island children in families with incomes less than 200% of the federal poverty level reporting special health care needs, compared with 14% nationally.

Rhode Island is required under Part C of the federal Individuals with Disabilities Education Act (IDEA) to provide appropriate Early Intervention services to all children from birth to age three who are developmentally delayed or have been diagnosed with a physical or mental condition that has a high probability of resulting in developmental delay. Recent changes to the federal legislation requires sates to refer children who have been involved in a substantiated case of child abuse or neglect and children who have been affected by illegal substance abuse to EI for an eligibility assessment. In addition, Rhode Island's eligibility criteria include children who are at-risk of experiencing a substantial delay if early intervention services are not provided through a multiple established conditions category (very few states choose to provide services to at-risk children).

In Rhode Island in 2009, ten certified Early Intervention provider agencies served 3,795 children. Nearly two-thirds (63%) of children receiving Early Intervention services were male and just over one-third (37%) were female. Enrollment is nearly evenly distributed among children by age, with 31% ages birth to one year, 35% between ages one and two, 33% between ages two and three, and less than 1% over age three. Children living in Rhode Island's core cities were almost twice as likely to participate in Early Intervention based on multiple established conditions (10.4%) than children in the remainder of the state (6.1%).

In Rhode Island, local school systems are responsible for identifying and evaluating students ages 3-21 who they have a reason to believe are students with disabilities and therefore might require special education and related services through IDEA. Between school year 1990/1991 and school year 2005/2006, the percentage of students enrolled in special education increased by 49% in Rhode Island. In school year 2004/2005 (the most recent year national data were tabulated), Rhode Island had the highest percentage (20%) of public school students identified as disabled and receiving special education services under IDEA in the nation.

In Rhode Island during the 2008-2009 school year, 17% (24,302) of children enrolled in K-12 public schools received special education services. Forty-one percent (41%) of students receiving special education services in Rhode Island had a learning disability.

Children who meet certain disability criteria are eligible for Medicaid and/or cash assistance through the federal Supplemental Security Income (SSI) Program. In 2006, there were 5,175 Rhode Island children under age 21 receiving Medical Assistance benefits because of their enrollment in SSI. In Rhode Island, the Katie Beckett eligibility provision provides Medical Assistance coverage to certain children who have serious disabling conditions, in order to enable them to be cared for at home instead of an institution. In 2005, there were 1,562 Rhode Island children under age 21 enrolled in Medical Assistance because of eligibility through the Katie Beckett provision.

Childhood obesity continues to be a crisis in RI. 36 percent of our WIC children are overweight or obese, as are 40 percent of our 7th graders and 27 percent of our high school youth. The situation is worse in urban areas where the built environment, and social and political influences make it hard for families to make healthy decisions. ARRA stimulus funds provide a unique opportunity for HEALTH to partner with non-traditional partners to address issues around community walkability, recreation, urban planning, zoning and access to affordable healthy foods. RI's tobacco control movement has successfully resulted in passage of smoke free work place laws and other legislation restricting the sale and promotion of unhealthy tobacco products. Lessons learned from these successes are informing legislative and community mobilization strategies in RI to reverse the unhealthy trends in overweight and obesity.

Pandemic Influenza 2009/20010

The importance of a strong and sustainable infrastructure for maternal and child health was well demonstrated this past year with the pandemic flu outbreak. It can be noted that because of the infrastructure that has been built in and with Title V, our immunization rates for our children and pregnant women greatly surpassed our neighboring New England states. Per the BRFSS 2009-2010 we achieved an 85% rate of immunization for infants, children and young adults and a rate of 67% for our pregnant women.