

Issue Brief

DISPARITIES IN CHILDREN'S HEALTH

A child's health is strongly affected by the family and community environment in which he or she lives, learns and plays, as well as by access to high-quality health care, high-quality early learning and educational opportunities, and nurturing relationships with parents and other adults.¹ Reducing disparities in child health requires community-based strategies and health care policies that support children's healthy development at home, at school and in the community.^{2,3} Health insurance and health care are vital to children's health status as a means of preventing or mitigating health problems and educating families about health issues.^{4,5}

Health disparities are associated with family income, educational status, race and ethnicity, and geography.^{6,7,8} Poor and low-income children have higher rates of mortality and disability than higher income children and are more likely to be in fair or poor health. Research shows that as neighborhood poverty levels increase, child well-being and opportunities for success decrease.⁹ One in ten Rhode Island children lives in a neighborhood of concentrated poverty (defined as census tracts with poverty rates of 30% or more). African American and Latino children are more likely than White children to live in these neighborhoods.¹⁰

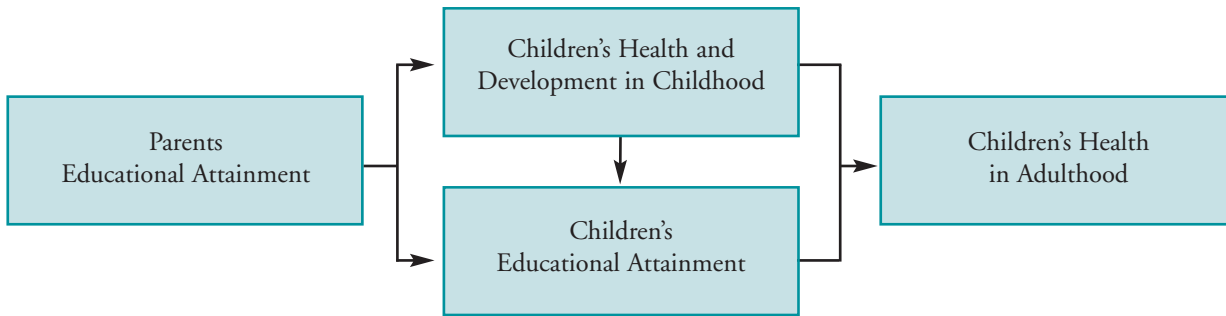
Black and Latino children are more likely to be in poor health than their White counterparts. Children who are poor, of color or uninsured are more likely to lack access to appropriate health care.¹¹ Rhode Island's children are diverse in terms of race, ethnicity and income. In 2010 in Rhode Island, 72% of children under age 18 were White, 8% were Black or African-American, 3% were Asian, less than 1% were Native American, 9% were Some other race and 7% were Two or more races. Twenty-one percent of Rhode Island children were Hispanic.¹²

CHILDREN'S HEALTH SHAPES HEALTH THROUGHOUT LIFE

◆ *“Good health and a nurturing and stimulating environment during childhood determine our potential for health and well-being throughout life.... Adult health outcomes that have been linked to early child development (often through effects on educational attainment and health-related behaviors and also through more direct physiologic effects) include heart disease and stroke, high blood pressure, diabetes, obesity, smoking, drug use and depression. These conditions account for a major portion of preventable illness and premature death in the United States.”*

From: Commission to Build a Healthier America. (October 2008). *America's Health Starts with Healthy Children: How Do States Compare?* Princeton, NJ: Robert Wood Johnson Foundation.

THE IMPACT OF EDUCATION ON HEALTH CROSSES GENERATIONS



- ◆ Parents with lower educational attainment typically face greater obstacles – including lack of knowledge, skills, time, money and other resources – to creating healthy home environments and modeling healthy behaviors for their children.
- ◆ Education is linked with health through three major pathways: Health knowledge and behaviors; employment and income; and social and psychological factors (including sense of control over one's life, social and economic resources, stress, health-related behaviors and family stability).
- ◆ Average health literacy increases with educational attainment. Health literacy is the degree to which individuals are able to obtain, process and understand basic health information and services needed to make appropriate health decisions and follow disease management protocols. Changes in health-related behaviors in response to new evidence, health advice and public health campaigns tend to occur earlier among people with higher levels of education.

Source: Commission to Build a Healthier America. (September 2009). *Education Matters for Health*. Princeton, NJ: Robert Wood Johnson Foundation.

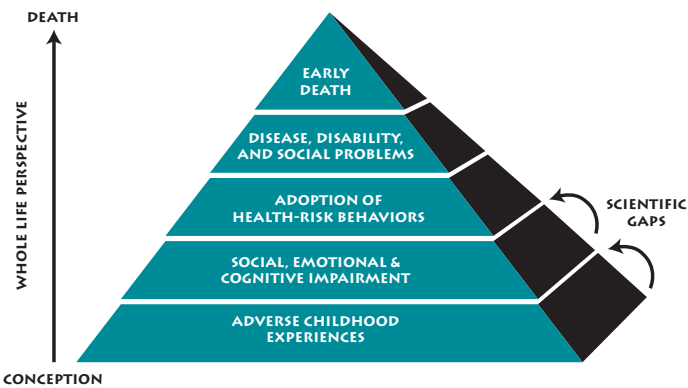
RHODE ISLAND FOUR-YEAR HIGH SCHOOL GRADUATION AND DROPOUT RATES, BY STUDENT SUBGROUP, CLASS OF 2011

	COHORT SIZE	FOUR-YEAR GRADUATION RATE	DROPOUT RATE	% COMPLETED GED	% OF STUDENTS STILL IN SCHOOL
All Students	12,000	77%	12%	3%	7%
English Language Learners	756	68%	20%	1%	11%
Students With Disabilities	2,521	58%	22%	3%	17%
Students Without Disabilities	9,479	82%	10%	3%	5%
Low-Income Students	6,032	66%	19%	5%	10%
Higher-Income Students	5,968	89%	5%	2%	4%
White	7,930	82%	9%	3%	6%
Asian	321	75%	14%	3%	7%
Black	1,135	67%	17%	4%	12%
Hispanic	2,343	67%	20%	3%	10%
Native American	71	66%	21%	4%	8%

Source: Rhode Island Department of Elementary and Secondary Education, Class of 2011 four-year cohort rates. Percentages may not sum to 100% due to rounding.

- ◆ One in five Hispanic and Native American students in Rhode Island dropped out of high school before getting a diploma or GED, compared to one in ten White students. The drop-out rates for Black students (17%) and Asian students (14%) were also higher than for their White peers (9%).¹³

THE ACE STUDY: ADVERSE CHILDHOOD EXPERIENCES (ACE) ARE LINKED TO ADULT HEALTH PROBLEMS



Source: Centers for Disease Control and Prevention (October 26, 2010). Pyramid. Retrieved on February 17, 2012 from <http://www.cdc.gov/ace/pyramid.htm>

Risk factors for many chronic diseases tend to cluster, that is, persons who have one risk factor tend to have one or more other risk factors too.¹⁴ The ACE Study takes a whole life perspective, as indicated by the arrow leading from conception to death. By working within this framework, the ACE Study began to progressively uncover how adverse childhood experiences are strongly related to the development and prevalence of risk factors for disease and health and social well-being throughout the lifespan.¹⁵

Childhood abuse, neglect, and exposure to other traumatic stressors which are termed adverse childhood experiences (ACE) are common. Adult participants in the ACE study reported on their exposure to abuse, neglect or other household dysfunction before the age of 18.¹⁶

ACE categories were as follows:

ABUSE:

- ◆ Emotional Abuse
- ◆ Physical Abuse
- ◆ Sexual Abuse

NEGLECT:

- ◆ Emotional Neglect
- ◆ Physical Neglect

HOUSEHOLD DYSFUNCTION:

- ◆ Mother Treated Violently
- ◆ Household Substance Abuse
- ◆ Household Mental Illness
- ◆ Incarcerated Household Member
- ◆ Parental Separation or Divorce

Almost two-thirds of study participants reported at least one adverse childhood experience, and more than one of five reported three or more adverse childhood experiences. The short- and long-term outcomes of these childhood exposures include a multitude of health and social problems. The ACE Study uses the ACE Score, which is a count of the total number of adverse childhood experiences respondents reported. The ACE Score is used to assess the total amount of stress during childhood. As the number of adverse childhood experiences increase, the risk for the following health problems increases in a strong and graded fashion:¹⁷

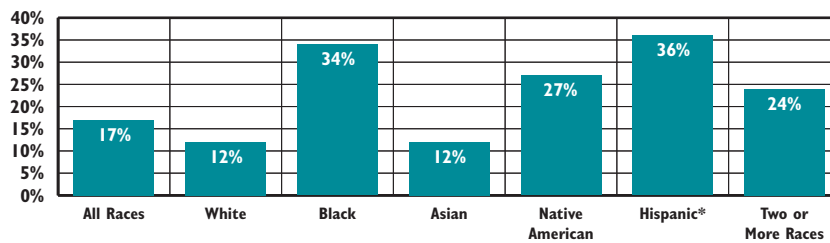
- ◆ Alcoholism and alcohol abuse
- ◆ Chronic obstructive pulmonary disease (COPD)
- ◆ Depression
- ◆ Fetal death
- ◆ Health-related quality of life
- ◆ Illicit drug use
- ◆ Ischemic heart disease (IHD)
- ◆ Liver disease
- ◆ Risk for intimate partner violence
- ◆ Multiple sexual partners
- ◆ Sexually transmitted diseases (STDs)
- ◆ Smoking
- ◆ Suicide attempts
- ◆ Unintended pregnancies
- ◆ Early initiation of smoking
- ◆ Early initiation of sexual activity
- ◆ Adolescent pregnancy



DISPARITIES IN FAMILY AND COMMUNITY ENVIRONMENTS

- ◆ The role of family and community factors in producing and influencing health, as well as the role of culture and cultural values, is critical to reducing disparities in health outcomes.^{18,19}
- ◆ Social differences leading to racial and ethnic health disparities include income, wealth, education and neighborhood socio-economic conditions.^{20,21} Research shows that families living in areas of concentrated poverty are more likely to struggle to meet their children's material needs (including food, housing, health insurance). Children in these neighborhoods are more likely to experience harmful levels of stress and severe behavioral and social problems than children overall.²²
- ◆ Chronic stress related to overt or subtle racial and ethnic biases may significantly contribute to health disparities among racial and ethnic groups, over and above differences in income, education, residence and medical care.^{23,24}

CHILDREN IN POVERTY, BY RACE AND ETHNICITY, RHODE ISLAND, 2008-2010



- ◆ In Rhode Island as well as in the United States as a whole, Hispanic, Black and Native American children are more likely than White and Asian children to live in families with incomes below the federal poverty threshold. Between 2008 and 2010, 36% of Hispanic, 34% of Black and 27% of Native American children in Rhode Island lived in poverty, compared to 12% of Asian children and 12% of White children.²⁵
- ◆ While Native American and Black children in Rhode Island are more likely to experience poverty than White children, children from these groups represent less than one-fifth (17%) of all children living in poverty in Rhode Island. Between 2008 and 2010, of all children living in poverty in Rhode Island, half (50%) were White, 16% were Black, 2% were Asian, 1% were Native American, 24% were Some other race and 7% were Two or more races.²⁶
- ◆ Between 2008 and 2010, 41% of Rhode Island's poor children were Hispanic. Hispanic children may be included in any race category. The Census Bureau asks about race separately from ethnicity, and the majority of families who identify as Some other race also identify as Hispanic.²⁷



FAMILY AND COMMUNITY FACTORS IN CHILD HEALTH

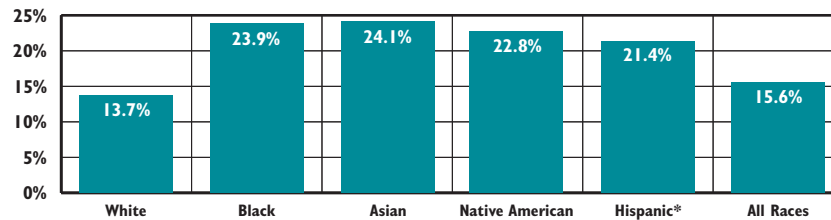
	CENTRAL FALLS	NEWPORT	PAWTUCKET	PROVIDENCE	WOONSOCKET	WEST WARWICK	RHODE ISLAND
Children in Poverty	41%	24%	25%	41%	32%	18%	17%
Births to Teens Ages 15-19 (per 1,000 teen girls)	85.5	25.5	53.1	40.6	75.1	41.7	27.0
Births to Mothers With < 12 Years of Education	37%	12%	21%	30%	24%	15%	16%
High School Graduation Rates	70%	81%	63%	66%	63%	75%	76%
Child Abuse and Neglect Rates (per 1,000 children under age 18)	23.3	28.3	17.2	19.1	27.3	25.9	13.3

Source: *Children in Poverty*, Census 2000; *Births to Teens* and *Births to Mothers With < 12 Years of Education* (2006-2010), Rhode Island Department of Health, Center for Health Data and Analysis; *High School Graduation Rates* (Class of 2011), Rhode Island Department of Elementary and Secondary Education; *Child Abuse and Neglect*, 2010, Rhode Island Department of Children, Youth and Families, RICHIST Database.

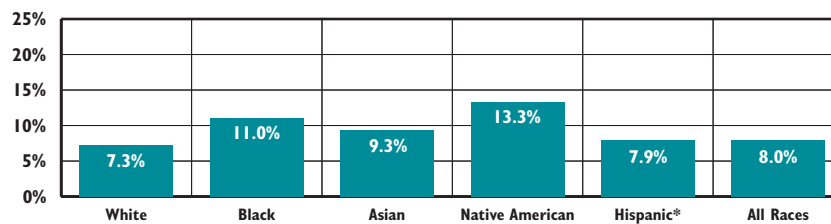
DISPARITIES IN MATERNAL AND INFANT HEALTH OUTCOMES

◆ The health status of pregnant women and their infants is an important measure of community well-being and a predictor of the health of the next generation.²⁸ Despite progress, there continue to be significant disparities in health outcomes among women and children in Rhode Island and across the nation.^{29,30,31}

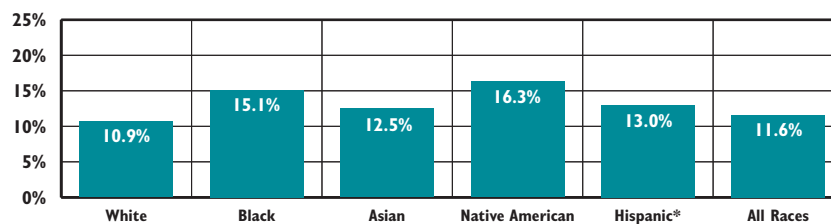
WOMEN WITH DELAYED PRENATAL CARE, BY RACE/ETHNICITY, RHODE ISLAND, 2006-2010



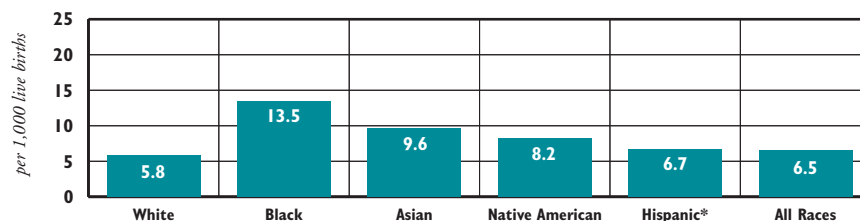
LOW BIRTHWEIGHT INFANTS, BY RACE/ETHNICITY, RHODE ISLAND, 2006-2010



PRETERM BIRTHS, BY RACE/ETHNICITY, RHODE ISLAND, 2006-2010



INFANT MORTALITY, BY RACE/ETHNICITY, RHODE ISLAND, 2006-2010



◆ Minority women are more likely than White women to receive delayed prenatal care, have a baby born low birthweight or delivered too early (preterm), and to have an infant who dies in the first year of life.

◆ Black families continue to have an infant mortality rate that is more than twice that of White families, with a slight increase in the Black infant mortality rate over the past decade.

Source: Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Database, 2006-2010. Data for 2010 are provisional.
*Hispanic may be included in any racial category.

OVERWEIGHT AND OBESITY, BY RACE/ETHNICITY, SCHOOL YEAR 2010-2011

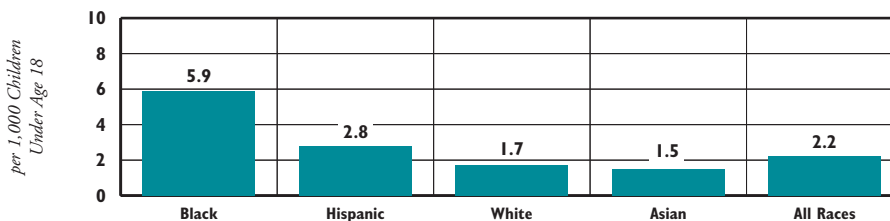
	OVERWEIGHT	OBESE	OVERWEIGHT OR OBESE
KINDERGARTEN			
White	17%	14%	31%
Black	14%	11%	25%
Hispanic	10%	25%	35%
SEVENTH GRADE			
White	20%	17%	37%
Black	15%	23%	38%
Hispanic	20%	30%	50%

Source: Initiative for a Healthy Weight Program. (2011). *The Burden of Overweight and Obesity in Rhode Island*. Providence: Rhode Island Department of Health.

- ◆ In Rhode Island in the 2010-2011 school year, more than one-third of all kindergarten children were overweight or obese. Rates of obesity were highest for Hispanic children in both kindergarten and seventh grade. Between kindergarten and seventh grade, all racial and ethnic groups showed increases in the proportion of children who were overweight or obese.³²
- ◆ Children and adolescents who are overweight or obese are at an increased risk for type 2 diabetes, high blood pressure, asthma, sleep apnea, joint pain and other chronic health problems. Being overweight during childhood can have lifetime impacts on physical and mental health.³³

CHILDREN WITH ASTHMA, BY RACE/ETHNICITY

ASTHMA HOSPITALIZATIONS WITH PRIMARY DIAGNOSIS OF ASTHMA, RHODE ISLAND, 2006-2010



Source: Rhode Island Department of Health, Hospital Discharge Database, 2006-2010; U.S. Census Bureau, Census 2010.

- ◆ Asthma is one of the most common chronic conditions in children, the third-ranked cause of hospitalization for children under age 15 and one of the leading causes of school absences.^{34,35}
- ◆ Racial and ethnic differences in asthma prevalence are believed to be correlated with poverty, exposure to indoor and outdoor air pollution, stress, lack of access to preventive medical care and genetic factors.^{36,37}

ACCESS TO A MEDICAL HOME

- ◆ Children who have a medical home, i.e. a regular source of professional, family-centered medical care and coordination, are more likely to receive high-quality asthma care. Studies have shown that children who relied on emergency room treatment were less likely to have used appropriate asthma control medication, less likely to have had regular medical follow-up and less likely to have seen an asthma specialist.³⁸



RECOMMENDATIONS

Addressing the continuing disparities in child health outcomes will require a range of strategies and investments.

- ◆ ***Focus on High-Poverty Communities.*** Communities with multiple problems such as poverty, poor housing conditions, and unemployment tend to have poorer child health outcomes than more advantaged communities. Black and Latino children are more likely to live in neighborhoods of concentrated poverty. These communities have higher rates of uninsured children, higher rates of delayed access to prenatal care, higher rates of low birthweight infants, and higher teen birth rates than the state as a whole. Government and civic leaders, community agencies, and families can work together to ensure that young women of childbearing age, infants, and children have access to high-quality health care and support services and that all children have access to high-quality learning environments from birth through high school graduation.
- ◆ ***Focus on Family Support and Infant Development.*** Poverty, isolation, lack of a support network and other risk factors place many women and infants at risk for poor health and developmental outcomes. For some families, the added problems of domestic violence, substance abuse, and maternal depression compromise child development, with long-term consequences. Medical providers report that limited reimbursements make it difficult to meet the multiple needs for education, referral and social services presented by many pregnant women and young children. Evidence-based home visiting programs can be expanded and linked with child development services that meet the needs of both the parent and the child. The cultural and linguistic competence of all service systems for pregnant women, infants and children can be improved.
- ◆ ***Focus on Access and Cultural Competence.*** The growing diversity of Rhode Island's population and continuing racial and ethnic disparities in maternal and child health outcomes indicates the need for investments that increase access for families diverse in culture and language. Specifically, additional resources can be targeted to programs that: 1) improve the cultural and linguistic competence of the service delivery system; 2) enlist community residents in service delivery for women and infants in order to ensure that services address real barriers and needs; 3) enhance outreach to link isolated families to existing services; and 4) increase service capacity in areas such as mental health and substance abuse treatment for women of childbearing age.
- ◆ ***Focus on the Healthy Development and Educational Success of Teens.*** Ensuring that teens have access to high quality health care throughout adolescence and reducing the pregnancy rates among teens are two measures that hold real potential for reducing racial and ethnic disparities in health outcomes. Promising strategies to prevent teen pregnancy and improve health outcomes for teens include: ensure that all young people are on track to graduate from high school and enroll in college; expand the capacity of prevention programs, including primary health care services designed to meet the special needs of teens of diverse racial, ethnic and cultural backgrounds; sustain and expand school-based health centers; increase access to prevention and family planning services; implement community-wide preventive health education targeted to teens; and invest in programs for adolescent parents that support the healthy development of the teen and their children.
- ◆ ***Sustain and Expand Investments in Low-Income Families.*** Sustained investments in income support programs for low-income families helps to avoid many of the negative outcomes associated with poverty. Community leaders can work to ensure that even the most high-risk families in their communities have access to health insurance, high-quality child care and early learning programs, cash assistance and job training, and jobs that pay a living wage. Building on Rhode Island's leadership in these critical policy areas is essential if we are to make progress toward eliminating disparities in maternal and child health.

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Rhode Island KIDS COUNT is a children's policy organization that provides information on child well-being, stimulates dialogue on children's issues, and promotes accountability and action.

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