



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 Practitioners
- 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

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>