Health

To a Child Dancing in the Wind

Dance there upon the shore;
What need have you to care
For wind or water's roar?
And tumble out your hair
That the salt drops have wet;
Being young you have not known
The fool's triumph, nor yet
Love lost as soon as won,
Nor the best labourer dead
And all the sheaves to bind.
What need have you to dread
The monstrous crying of wind?

William Butler Yeats

Children's Health Insurance

DEFINITION

Children's health insurance is the percentage of children below age 19 who are covered by any kind of public or private health insurance, including Medicaid during the previous calendar year.

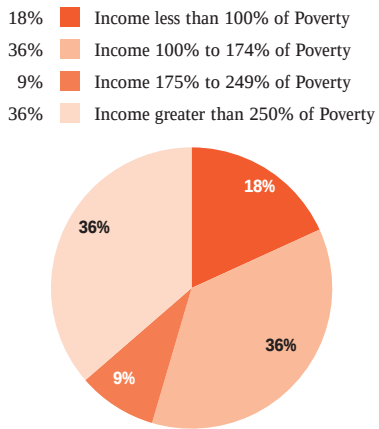
SIGNIFICANCE

Children's health insurance status is the major determinant in whether children have access to care. Children who lack insurance coverage are more likely to have poor health outcomes at birth and have fewer well-child visits.[1,2] Insured children are more likely than uninsured children to receive medical care for common conditions like asthma and ear infections – illnesses that if left untreated can have life-long consequences and lead to more serious health problems.[3]

When parents are insured and have access to health care, their children are also more likely to use health care.[4] Children's health insurance status is linked to parental access to employer-sponsored insurance. As the unemployment rate rises, the number of uninsured people grows due to the loss of employer-sponsored insurance. Over the past decade, the effect of decreased access to employer-sponsored insurance has been lessened by increased access to public insurance.[5]

RIte Care/RIte Share, Rhode Island's Medicaid managed care program, is available to inome - eligible children and families. Of the 117,507 RIte Care members enrolled as of December 31, 2002, nearly two-thirds (76,151) were children under age 19. There were 41,356 low-income parents enrolled in RIte Care as of December 31, 2002. Of these, 12,546 received RIte Care because they were enrolled in FIP (Family Independence Program).[6]

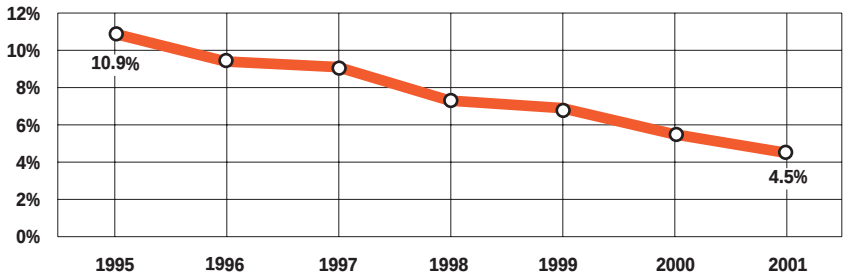
Children Under Age 19 without Health Insurance, by Poverty Level, Rhode Island, 2001



n = 11,000

Source: U.S. Bureau of Census, Current Population Survey, 2000-2002 average. Compiled by The Annie E. Casey Foundation. These data reflect only those who were uninsured through the entire year and do not include those who were insured for only part of the year.

Children without Health Insurance, Rhode Island, 1995 - 2001



Source: US Census Bureau, Current Population Survey, 1994-2002, 3 year averages, compiled by Rhode Island KIDS COUNT.

◆ As of 2001, 4.5% of Rhode Island's children under age 19 were uninsured, the lowest rate of uninsured children in the country.[7] Nationally, 13% of children under 19 were uninsured.[8] The rate of uninsured children in Rhode Island has been reduced by more than half over the past six years.[9]

◆ As of 2001, there were 11,000 uninsured children in Rhode Island. Of these, an estimated 7,000 Rhode Island children were eligible for RIte Care but uninsured. Ninety-one percent of Rhode Island's uninsured children live in working families.[10]

RIte Care/RIte Share Program Updates

◆ During 2002, RIte Share expanded to include 1,061 adults and 1,844 children.[11] RIte Share, Rhode Island's health insurance premium assistance program, enables eligible families with access to employer-sponsored insurance to participate in their employer's insurance plan. RIte Share pays the employer's share of the cost for enrolling in an approved employer-sponsored family or individual health insurance plan.[12]

◆ Eligibility guidelines for RIte Share are the same as for RIte Care, i.e. the employee must have a RIte Care-eligible family member in order to enroll in RIte Share. RIte Share provides the full range of RIte Care benefits to families by covering RIte Care services not included in the employer's health plan.[13]

Table 11.

Children Under Age 19 Receiving Medical Assistance, Rhode Island, December 2002

CITY/TOWN	RIte Care FIP	RIte Care Non-FIP	SSI	Other	Total
Barrington	34	180	11	56	281
Bristol	195	501	29	41	766
Burrillville	133	458	40	139	770
Central Falls	1,809	2,330	235	26	4,400
Charlestown	62	218	9	27	316
Coventry	294	936	59	170	1,459
Cranston	1,107	2,582	204	262	4,155
Cumberland	204	672	49	131	1,056
East Greenwich	68	206	15	67	356
East Providence	842	1,851	144	153	2,990
Exeter	37	130	3	45	215
Foster	31	85	2	35	153
Glocester	52	227	14	73	366
Hopkinton	37	264	11	13	325
Jamestown	22	63	6	21	112
Johnston	376	932	66	60	1,434
Lincoln	160	508	31	75	774
Little Compton	15	41	3	4	63
Middletown	120	399	39	60	618
Narragansett	118	266	17	71	472
New Shoreham	1	18	1	0	20
Newport	1,023	1,019	105	72	2,219
North Kingstown	255	704	40	84	1,083
North Providence	448	930	60	110	1,548
North Smithfield	40	158	13	53	264
Pawtucket	3,460	4,933	476	211	9,080
Portsmouth	59	319	9	69	456
Providence	15,084	15,263	1,818	2,470	34,635
Richmond	44	143	15	45	247
Scituate	59	269	14	62	404
Smithfield	71	263	20	62	416
South Kingstown	243	559	49	103	954
Tiverton	123	382	29	31	565
Warren	183	339	24	42	588
Warwick	845	2,553	203	312	3,913
West Greenwich	27	126	4	33	190
West Warwick	637	1,334	96	100	2,167
Westerly	298	795	45	57	1,195
Woonsocket	2,302	2,577	372	228	5,479
Out of State	*137*	*32*	*0*	*0*	*169*
Unknown	*276*	*148*	*70*	*51*	*545*
Core Cities	*24,315*	*27,456*	*3,102*	*3,107*	*57,980*
Remainder of State	*6,603*	*18,077*	*1,278*	*2,566*	*28,524*
Rhode Island	*31,331*	*45,713*	*4,450*	*5,724*	*87,218*

Source of Data for Table/Methodology

Rhode Island Department of Human Services, MMIS Database, December 31, 2002. Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

The column labeled "RIte Care/FIP" is the number of children enrolled in RIte Care as of December 31, 2002 who also participate in the Family Independence Program. "RIte Care, Non-FIP" includes all other RIte Care participants under the age of 19 and pregnant women. "SSI" is children enrolled in fee-for-service Medicaid because they receive SSI. "Other" includes children in DCYF out-of-home placements (foster care) and non-SSI children with disabilities who are enrolled in fee-for-service Medicaid. "Other" also includes 1,981 children in DCYF out-of-home placements (foster care) who are enrolled in RIte Care under an initiative begun with DCYF in November 2000. The Providence numbers may include foster children who live in other towns, because the DHS database lists foster children as Providence residents for administrative purposes.

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[7,9] U.S. Bureau of the Census, Current Population Survey, 1992-1996 average and 2000-2002 average. Compiled by Rhode Island KIDS COUNT.

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Childhood Immunizations

DEFINITION

Childhood immunizations is the percentage of children ages 19 months - 35 months who have received the entire 4:3:1:3:3 Series of vaccinations as recommended by the Advisory Committee on Immunization Practices (ACIP). The Series includes 4 doses of Diphtheria, Tetanus and Pertussis (DTaP); 3 doses of Polio; 1 dose of Measles, Mumps, Rubella (MMR); 3 doses of Haemophilus influenzae type b (Hib); and 3 doses of Hepatitis B vaccines. The ACIP has also added pneumococcal disease and varicella (chickenpox) vaccines to its recommendations, but they are not included in the 4:3:1:3:3 Series.

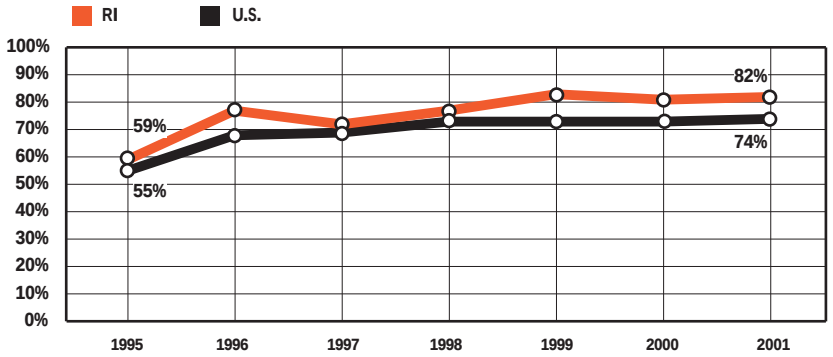
SIGNIFICANCE

Adequate immunization protects children against several diseases that killed or disabled children in past decades.[1] Vaccines interact with the immune system to produce antibodies which protect the body if exposed to the disease in the future.[2] Individual benefits of vaccination include protection from illness, improved quality of life and productivity, and prevention of death. Societal benefits include creation and maintenance of community immunity, prevention of disease outbreaks, and reduction of health-related costs.[3] Although many of the diseases children are vaccinated for are rare, it is important to continue to immunize them until the diseases are completely eradicated.[4]

Since coming into widespread use, immunizations have saved billions of lives around the world.[5] Vaccines are one of the most cost-effective tools in preventing disease.[6] In order to eliminate cost as a barrier to vaccination, the federal Vaccines for Children (VFC) program allows states to purchase vaccines at a discounted price. Providers then administer the vaccines at no cost to eligible children including those who are uninsured, underinsured, or Medicaid eligible. Rhode Island is one of a few states that purchases all vaccines for children and distributes them to providers[7,8]

Vaccine recommendations for the United States are created by the Advisory Committee on Immunization Practices, a group of health experts who advise the Centers for Disease Control and the U.S. Department of Health and Human Services.[9] In accordance with national recommendations, Rhode Island requires vaccination against the following diseases prior to entry into child care, Head Start or kindergarten: Diphtheria, Tetanus and Pertussis (DTaP); Hepatitis B; Haemophilus influenzae type b (Hib); Measles, Mumps, Rubella (MMR); Polio; and Varicella (chickenpox).[10]

Immunized Children, Ages 19 Months – 35 Months, United States and Rhode Island, 1995-2001

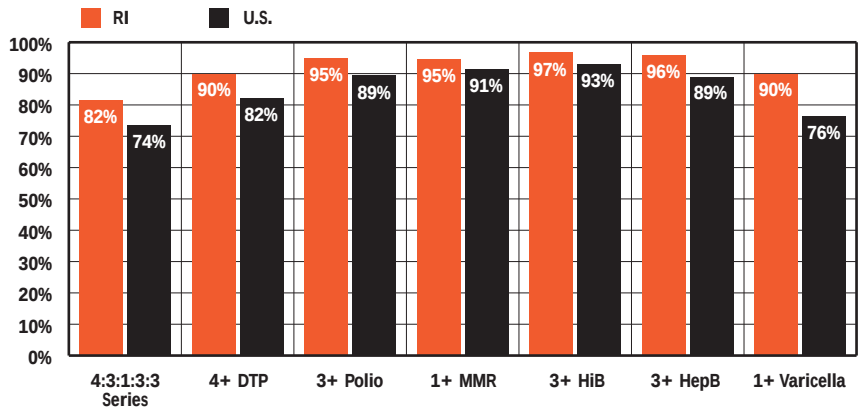


Source: Centers for Disease Control and Prevention, National Immunization Survey, 1995-2001.

◆ In 2001, 82% of Rhode Island children ages 19-35 months were fully immunized with the 4:3:1:3:3 Series, compared to 74% nationally. Immunization rates increased by 40% in Rhode Island between 1995 and 2001, compared to a 34% increase nationwide.[11]

◆ Despite the improvement of vaccination rates overall, racial and economic disparities persist. In the United States during 2001, 75% of White children were fully immunized compared to 67% of Black children. Children at or above the poverty level had a 75 % vaccination rate while children below the poverty level had a 68% vaccination rate.[12]

Estimated Vaccination Coverage Among Children Ages 19 Months - 35 Months, United States and Rhode Island, 2001



Source: Centers for Disease Control and Prevention, National Immunization Survey, 2001.

◆ Rhode Island ranked among the top ten states on vaccination rates for every childhood vaccine in 2001. Rhode Island had the best vaccination rates in the nation for 3+Hep B (hepatitis B), 1+Varicella (chickenpox) and the 4:3:1:3:3 Series.[13]

◆ The Rhode Island Immunization Program conducts an annual statewide school immunization survey to assess immunization levels of children attending licensed child care centers and Head Start programs, entering kindergarten, and 7th grade. The 2001-2002 Rhode Island School Immunization Survey included 45,060 children over the age of 19 months across 753 sites. Immunization rates for each of the vaccines included in the survey were above 90% for children in child care, Head Start and kindergarten.[14]

◆ Varicella (chickenpox) vaccine was added to the national ACIP recommendations in 1996. In 1999, Rhode Island included varicella vaccine in preschool and school entry requirements and expanded to 7th grade entry in 2000.[15] In 2001, Rhode Island ranked first in the nation for the percentage of 19-35 month olds vaccinated against varicella (90%). The national average for varicella vaccination was 76% in 2001.[16]

Adolescent Immunization

◆ Many adolescents are affected by diseases that are preventable with proper vaccination. Adolescents who have not been previously vaccinated against varicella (chicken pox) and hepatitis B or received a second dose of measles, mumps and rubella (MMR) need to be immunized and all adolescents require a booster dose for tetanus and diphtheria (Td).[17]

◆ In order to ensure that all teenagers are appropriately vaccinated before they leave school, the Rhode Island Department of Health's Immunization Program has partnered with the Rhode Island Childhood Immunization Action Coalition to create Vaccinate Before You Graduate (VBYG). The program informs parents and educates students on the importance of immunization and then holds vaccination clinics throughout the year at each participating school. The immunizations are funded through the state's Vaccine for Children Programs and are offered at no cost to students.[18]

◆ During the 2001-2002 school year, 31 schools participated in the program. Of the 1,090 students who returned consent forms, 94% were vaccinated and 75% completed the requested course of vaccinations. As of January 2003, 66 schools were enrolled in the program.[19]

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Access to Dental Care

DEFINITION

Access to dental care is the percentage of children under age 21 who are enrolled in RIte Care or Medicaid fee-for-service who have received dental prevention or treatment services during state fiscal year 2000.

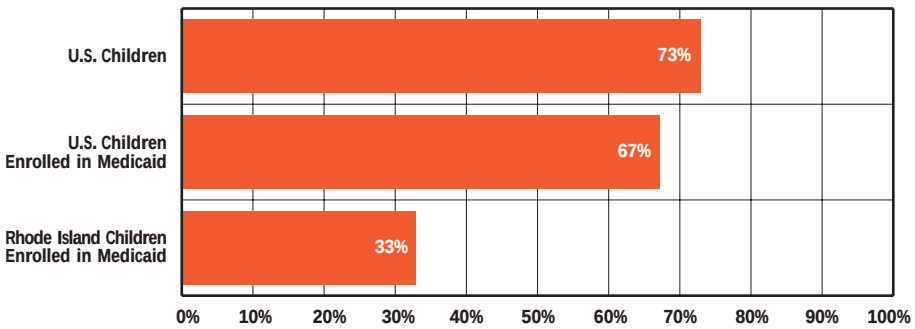
SIGNIFICANCE

Dental caries (tooth decay) is the most common disease among children 5 to 17 years old.[1] Preschool children with untreated dental caries are more likely to develop poor eating habits, to have difficulty socializing with peers, and to have speech problems. Children with poor dental health are at increased risk for future dental caries in their permanent teeth.[2] Chronic dental problems in school-age children and adolescents can lead to poor self-image, difficulty concentrating, absenteeism and reduced school performance.[3]

Children without dental insurance are three times as likely as privately-insured children to be unable to access dental care when needed.[4] In 1999 in Rhode Island, fewer than half (45%) of employers offered dental insurance as a benefit.[5] National estimates indicate that for every child without medical insurance there are 2.6 children without dental insurance.[6] Minority families, low-income families and families with low education levels are the most likely to be uninsured for dental care.[7]

For children in low-income families, the efficacy of public dental insurance is a critical factor in access to dental prevention and treatment.[8] The federal Medicaid program mandates that states provide comprehensive dental services to eligible children up to age 21 including preventive dental care, dental treatment services, translation services, and transportation.[9] Barriers to obtaining oral health services for children enrolled in RIte Care or Medicaid fee-for-service include difficulty finding a provider who will accept Medical Assistance, inadequate financial resources to pay for dental care, and lack of parental education on the need for dental prevention and treatment services.[10] Obtaining services from dental specialists is especially difficult for children covered through public health insurance programs.[11] Children with disabilities or special health care needs may also have problems accessing providers that are equipped to address their special needs.[12]

Children with a Dental Visit in the Previous Year, United States and Rhode Island



Source: Centers for Disease Control and Prevention, Summary Health Statistics for U.S. Children; National Health Interview Survey, 1998, and Rhode Island Department of Human Services, Calendar Year 2000. Rhode Island data include RIte Care and Medicaid fee-for-service.

◆ In the United States, approximately 73% of all children and 67% of children enrolled in Medicaid or other public insurance have seen a dentist in the past year.[13] Among Rhode Island children under age 21 enrolled in public insurance programs, only one in three (33%) accessed dental prevention or treatment services during calendar year 2000.[14]

◆ Children in families with incomes below the poverty level and minority children have the greatest extent of untreated dental problems. Children eligible for Medicaid services experience twice the ratio of untreated dental disease as more affluent children.[15]

◆ The reluctance of many dentists to accept patients with Medicaid coverage compounds a general shortage of dentists nationwide, especially in urban areas. Low reimbursement rates that fail to cover the cost of services and administrative difficulties are two reasons cited by dentists for limiting or not serving Medicaid patients.[16] State efforts to attract more dentists to Medicaid by paying higher fees and streamlining administrative requirements have resulted in increased access to dental care services.[17]

Oral Health and Schools

◆ Poor oral health has been related to decreased school performance, poor social relationships, and less success later in life. Children with chronic dental pain are unable to focus, are easily distracted and may have problems completing schoolwork. When children with acute dental problems are treated, their grades and school attendance improve.[18]

◆ School-based dental programs are an efficient way to reach children who do not regularly access dental care. In addition to providing students with preventative oral health services, they educate families on the importance of oral health and proper dental hygiene. Options for providing school-based dental services include on-site dental clinics that are linked to school health clinics, to dental treatment services in the community, and/or to mobile dental services.[19]

◆ School-based health programs have unique strengths that make them particularly capable of meeting the needs of children, especially low-income children who are at greatest risk for untreated dental problems. Health services based in schools allow students to seek care with minimal disruption to the school day and miss fewer classes. Parents are not required to take time off from work, find child care, or access transportation in order to obtain care for their children, all of which may be particularly difficult for single and low-income parents.[20]

◆ In the U.S., elementary school students with access to a school-based health center are more likely to have had a dental exam than students without access. Uninsured students have greater success in obtaining dental services at schools with health centers than at those without.[21,22]

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Children's Mental Health

DEFINITION

Children's mental health is the number of children under age 18 using the mental health treatment system in Rhode Island.

SIGNIFICANCE

Mental health in childhood and adolescence is defined by the U.S. Surgeon General as the achievement of expected developmental, cognitive, social and emotional milestones and by secure attachments, satisfying social relationships, and effective coping skills.[1] One in five U.S. children ages 9 to 17 has a diagnosable mental or addictive disorder. One in ten suffers significant functional impairment as a result of their disorders.[2] Of all U.S. children with some mental or emotional problem or functional limitation it is estimated that only 19% see a mental health provider on a regular basis.[3] Children and youth with severe emotional disturbances who do not get early screening and prevention services are more likely to live in poverty and be dependent on the adult mental health system.[4]

Mental health problems affect children of all backgrounds. Children at risk for developing a mental disorder or experiencing problems in social-emotional development include those with prenatal damage from exposure to alcohol, illegal drugs, and tobacco; those born with low birth weight, difficult temperament, or an inherited predisposition to a mental disorder; children with external risk factors such as poverty, deprivation, abuse and neglect, unsatisfactory relationships, or exposure to traumatic events; and children whose parent has a mental health or substance abuse disorder.[5]

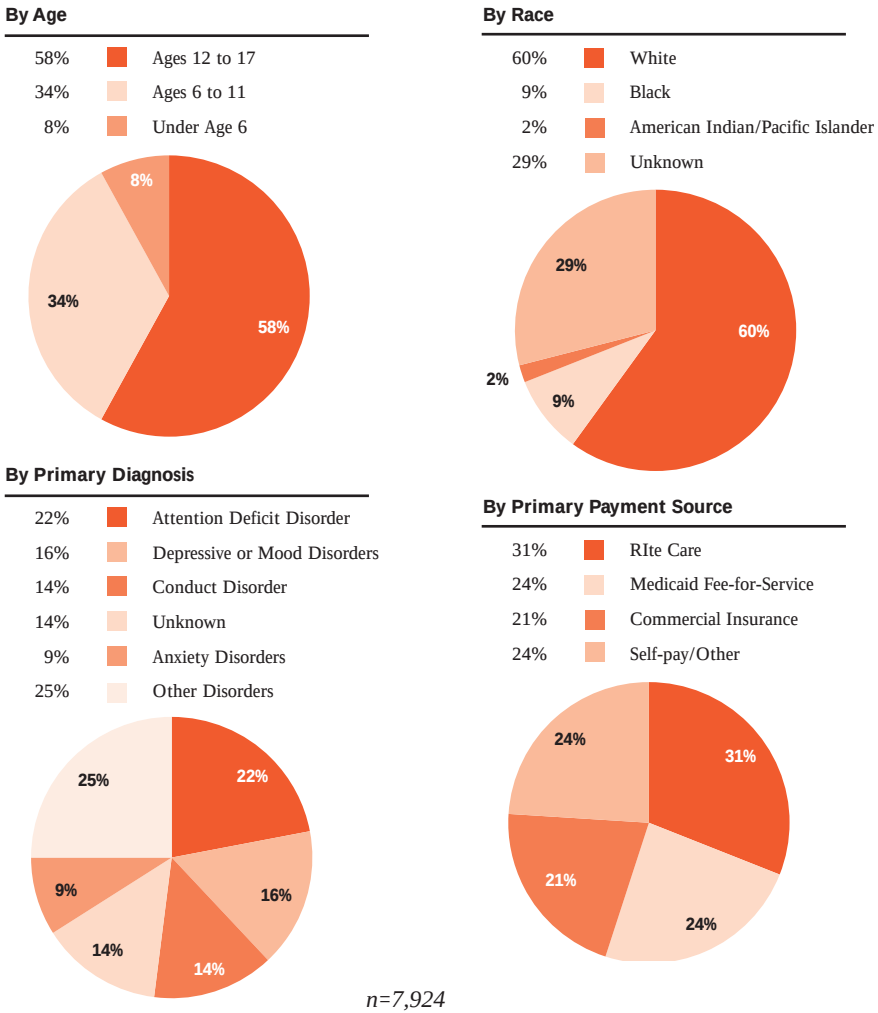
Both nationally and in Rhode Island, mental health systems tend to be crisis-driven with disproportionate spending on high-end hospital care and inadequate investment in prevention and a continuum of community services.[6,7,8] Children with mental health needs can be found in nearly every system serving children.

Primary health care settings and the schools are important sites for the identification of children with mental health needs and provide opportunities for early intervention.[9]

Nationally, the public school system is the sole provider of services for nearly half of all children receiving mental health services.[10] School systems are mandated to provide special education services to children and adolescents whose disabilities interfere with their education.[11] In the 2001-2002 school year, there were 2,857 Rhode Island children between the ages of 3 and 21 identified within the special education system as being disabled because of behavioral disorders.[12]

Rhode Island's Community Mental Health Centers

◆ During 2002, the eight community mental health centers in Rhode Island treated 7,924 children. As of December 31, 2002, there were 3,443 children receiving services through the community mental health centers.



n=7,924

Source: Rhode Island Department of Mental Health, Retardation and Hospital, data from eight community mental health centers, January-December 2002. Data for one month is missing for one mental health center.

Hospitals

◆ In calendar year 2000, 12,062 children were in enrolled in fee-for-service Medical Assistance by virtue of SSI eligibility (45%), subsidized/special needs adoptions (38%), Katie Beckett eligibility (8%) and DCYF out-of-home placement (8%).[13] The annual hospitalization rate for these children was 173 per 1,000. Children in DCYF out-of-home placement had a rate of 262 hospitalizations per 1,000. Nine out of ten hospitalizations of children in out-of-home placement were for mental disorders.[14]

◆ Bradley Hospital is Rhode Island's largest psychiatric center for children. In fiscal year 2002, 5,796 outpatient psychiatric visits were provided to children and there were 833 admissions of children to the hospital. An average of 40 families per day were served through Bradley's home-based program and an average of 156 students per day were served at Bradley's schools for children with mental illness and developmental disabilities. Bradley Hospital also serves children in partial hospital and residential treatment programs.[15]

◆ In fiscal year 2002, Rhode Island Hospital provided 12,484 child psychiatry outpatient visits and served 165 children and youth with medical/psychiatric conditions in its Hasbro Partial Hospital Program.[16]

◆ Butler Hospital provides a wide range of psychiatric services for children and adolescents. In 2002, Butler Hospital provided services to 876 children and youth age 18 and under, as compared with 1,179 in the previous year and 2,338 in 2000. Of the 876 children served in 2002, 724 were admitted to the hospital and the remaining 152 were in partial hospital or outpatient programs.[17]

Supporting Families of Children with Mental Illness

◆ The family caregivers of children with mental health issues are likely to feel isolated, pushed to the breaking point, and unsupported by friends, families, or the health and education systems.[18,19]

◆ In a 1998 Rhode Island survey of family caregivers of mentally ill children:

- 83% reported feeling overwhelmed.
- 74% were unable to find child care appropriate to their child's needs.
- 81% lacked information on their child's primary condition.
- 99% reported a need for parent education classes.
- 99% reported a need for respite care.[20]

◆ A growing body of research and practice indicates that a comprehensive mental health system for children needs to include: multiple and diverse support systems for families, skill-building for parents, teachers and other caregivers, and prevention and treatment provided in natural settings, such as homes, schools, child care centers and community organizations.[21,22,23,24]

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Children with Special Needs

DEFINITION

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 by children generally. Special needs can be physical, developmental, behavioral, and/or emotional. This indicator measures the number of children enrolled in Early Intervention, Special Education, and Supplemental Security Income (SSI) in 2002.

SIGNIFICANCE

As many as 18% of children nationwide have a chronic physical, developmental, behavioral or emotional condition that requires health care and related services.[1] Some chronic and disabling conditions among children include mental retardation, attention deficit disorder, asthma, autism, hearing impairment, communication disorders, seizure disorders, and congenital diseases.[2,3]

Children with special needs are a heterogeneous group, varying by the type and severity of the chronic disease or disability. Needs will vary based on the age of the child, as well as by the many differences in the population at large, such as family income, race, ethnicity, primary language, and parents' educational level.[4] Children with chronic or disabling conditions are likely to have functional limitations or impairments in physical, social, emotional or behavioral functioning in comparison with their peers of the same age.[5] Youth with special needs are much less likely than their non-disabled peers to finish high school, go on to postsecondary education, find employment, and live independently.[6]

There are some issues of common concern to families of children with chronic or disabling conditions. Whether disabilities are mild or severe, they have the potential to create special needs related to physical health, mental health, education, family support, child care, recreation, and career preparation. For many parents, having a child with special needs has a significant impact on their finances, their jobs, and their family life.[7,8]

Children with special needs require access to services that are appropriate to their individual health, education, and social-emotional needs in order to reach their full potential and minimize the likelihood of life-long dependence.[9,10] Some children with disabilities may require costly therapeutic and health care services, wheelchairs, assistive technology, or home modifications which may result in serious financial burdens on families.[11]

Medical Assistance Coverage for Children with Special Health Care Needs

◆ Children who meet certain disability criteria are eligible for Medicaid and/or cash assistance through the federal Supplemental Security Income (SSI) program.[12] As of December 31, 2002, there were 4,450 Rhode Island children receiving Medical Assistance benefits because of their enrollment in SSI.[13]

◆ One national study indicates that many children with special health care needs do not qualify for SSI and that 85% of the children with special needs enrolled in Medicaid did not enter the Medicaid system by reason of SSI eligibility.[14]

◆ In Rhode Island, the Katie Beckett eligibility provision provides Medical Assistance coverage to certain children under the age of 18 who have serious disabling conditions, in order to enable them to be cared for at home instead of in an institution. As of December 31, 2002, there were 1,207 Rhode Island children enrolled in Medical Assistance because of eligibility through the Katie Beckett provision.[15] Another 135 children were receiving Medical Assistance because of participation in long-term care, waiver and other specific circumstances.[16]

Children in the Child Welfare System

◆ According to the National Survey of American Families, 27% of children in the child welfare system across the U.S. show high levels of behavioral and emotional problems and 28% have a physical, learning, or mental health condition that limits their activities.[17]

◆ More than half of young children in foster care experience serious physical problems and over half experience developmental delays. This is four to five times the rate of developmental delay found among children in the general population.[18]

◆ Children who are adopted through the Department of Children, Youth and Families and have special needs may qualify for adoption subsidies, including Medical Assistance. As of December 31, 2002, 2,236 children were receiving Medical Assistance because of special needs adoptions. In addition, 2,161 children were enrolled in Medical Assistance due to their foster care status.[19]

Children Enrolled in Early Intervention

◆ States are required to provide appropriate Early Intervention services to all children from birth to age 3 who are developmentally delayed or have been diagnosed with a physical or mental condition that has a high probability of resulting in developmental delay.[20] One important focus of the program is on enhancing the capacity of families to meet the needs of their children by supporting the needs of the entire family.[21]

◆ In 2002, the seven Early Intervention programs in Rhode Island served 2,504 children ages birth to three.

◆ In 2002, 63% of children served had significant developmental delays, i.e. physical, cognitive, behavioral, and/or emotional delays of unknown medical origin. One in five (21%) had a single established condition affecting development, such as Down Syndrome or cerebral palsy.

◆ Seven percent of children served had multiple established conditions, i.e. evidence of developmental delay in combination with multiple prenatal or early life biological events that put the child at risk of further developmental delays. Risk criteria include teen parents, impoverished home environment, poor nutrition, and others.

Source: Rhode Island Department of Health, December 31, 2002

Children Enrolled in Special Education

◆ Local school systems are responsible for identifying and evaluating students ages 3 to 21 whom they have reason to believe are students with disabilities and therefore might require special education and related services.

◆ In Rhode Island during the 2001-2002 school year, there were 33,058 public school children enrolled in Special Education, 22% of the public school student population. Almost half of all children in special education n Rhode Island have a learning disability.

◆ Early Intervention programs for children birth to age 3 are required to provide transition services for children who may be eligible for Special Education at age 3. In 2002, 420 children who reached age 3 were referred from Early Intervention to Special Education. During the 2001-2002 school year, there were 2,425 children ages 3 to 5 receiving Special Education services in Rhode Island public schools (who were not yet in kindergarten).

Source: The Rhode Island Department of Elementary and Secondary Education, Office of Special Education, June 30, 2002.

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Women and Children Receiving WIC

DEFINITION

Women and children receiving WIC is the percentage of eligible women, infants and children served by the Special Supplemental Nutrition Program for Women, Infants and Children (WIC).

SIGNIFICANCE

The Special Supplemental Nutrition Program for Women, Infants and Children is a preventive program providing nutritious food, nutrition education, and improved access to health care.[1] This federally-funded program serves pregnant, postpartum and breastfeeding women, infants, and children under five years of age with household incomes below 185% of the poverty level. In addition, any individual who participates in the Food Stamp program, RIte Care, Medicaid, cash assistance through the Family Independence Program, or is a member of a family in which a pregnant woman or infant receives Medicaid benefits, is deemed automatically income eligible. Participants must have a specified nutritional risk, such as anemia, history of poor pregnancy outcomes or inadequate dietary patterns.[2,3]

WIC is not an entitlement program and is not funded at a level that is sufficient to serve all eligible women, infants, and children.[4] Rhode Island received $13.9 million dollars in federal funding during fiscal year 2002 and served 23,969 people.[5,6]

WIC participants purchase a monthly food package – an individually prescribed combination of targeted foods to improve the nutritional quality of their diets – at local retailers with checks or coupons.[7] WIC participants also receive nutrition education and health care referrals through the program.[8] WIC promotes breastfeeding as the optimal method of infant feeding and program eligibility for breastfeeding mothers is extended for up to one year.[9] Between 1993 and 2002, the percentage of WIC infants who were breastfed more than doubled, increasing from 6.4% to 14.6%.[10]

WIC participation improves birth outcomes, increases the nutrient intake of preschoolers, increases breastfeeding rates and immunization coverage, improves cognitive development and increases the likelihood of having a regular medical care provider.[11]

Overweight Children and Childhood Obesity

◆ WIC was first established in 1972 to combat malnutrition and hunger in low-income Americans. Since that time, overweight and obesity have become a serious heath issue in the United States. An estimated 1 in 10 children in the WIC program is overweight, an increase of 20% since 1983.[12]

◆ The increase of overweight and obesity among WIC participants may be related to the overall increase in the general population and the prevalence of overweight among low-income groups that are served by the program. Because the goal of the WIC program is to improve nutrition and healthy eating, overweight is one of the nutritional risk criteria used to determine eligibility.[13]

◆ Participation in WIC provides a unique opportunity for overweight children and their families to improve their health. WIC foods are more nutritious than typical foods in poor children's diets, its educational counseling promotes healthy food choices and age-appropriate physical activity and its health referral component increases access to medical intervention for overweight.[14]

Table 12. **Women, Infants and Children Receiving WIC, Rhode Island, December 2002**

CITY/TOWN	ESTIMATED* NUMBER ELIGIBLE	NUMBER PARTICIPATING	% OF ELIGIBLE PARTICIPATING
Barrington	211	29	14%
Bristol	403	180	45%
Burrillville	427	226	53%
Central Falls	1,642	1,517	92%
Charlestown	105	85	81%
Coventry	592	282	48%
Cranston	1,753	871	50%
Cumberland	554	216	39%
East Greenwich	241	53	22%
East Providence	1,205	708	59%
Exeter	13	36	100%*
Foster	10	47	100%*
Glocester	293	28	10%
Hopkinton	33	82	100%*
Jamestown	96	13	14%
Johnston	598	294	49%
Lincoln	360	144	40%
Little Compton	63	9	14%
Middletown	694	248	36%
Narragansett	71	90	100%*
New Shoreham	39	1	3%
Newport	1,332	606	45%
North Kingstown	370	174	47%
North Providence	262	331	100%*
North Smithfield	59	48	81%
Pawtucket	3,198	2,772	87%
Portsmouth	249	84	34%
Providence	11,280	8,982	80%
Richmond	24	55	100%*
Scituate	75	60	80%
Smithfield	174	67	39%
South Kingstown	402	193	48%
Tiverton	260	89	34%
Warren	156	119	76%
Warwick	1,613	872	54%
West Greenwich	38	17	45%
West Warwick	777	664	85%
Westerly	648	307	47%
Woonsocket	2,566	1,561	61%
Unknown Residence	*NA*	*38*	*NA*
Core Cities	*20,795*	*16,102*	*77%*
Remainder of State	*12,091*	*6,058*	*50%*
Rhode Island	*32,886*	*22,198*	*67%*

**Estimated number eligible is based on the 1990 Census and does not reflect recent increases in eligible population.*

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, WIC Program, Fiscal Year 2002.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

The denominator is the number of pregnant and post-partum women, infants and children under age 5 who live in families with an income less than 185% of poverty according to the 1990 Census of Population as estimated by the United States Department of Agriculture. This is an estimate of the eligible population and does not take into account any increases or decreases in the number of women and children who became income eligible after 1990.

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Breastfeeding

DEFINITION

Breastfeeding is the percentage of newborn infants who are exclusively breastfed at the time of hospital discharge.

SIGNIFICANCE

The American Academy of Pediatrics (AAP) identifies breastfeeding as the ideal method of feeding and nurturing infants and recognizes breastfeeding as of primary imprtance in achieving optimal infant and child health, growth and development. The AAP recommends exclusive breastfeeding for approximately six months after birth and, in conjunction with appropriate solid foods, for at least 12 months after birth, and thereafter as long as mutually desired.[1] *Healthy People 2010*, the nation's health agenda, has established target breastfeeding rates of 75% at birth, 50% at six months and 25% at one year.[2] The 1998 *Healthy People 2010* baseline data shows that United States breastfeeding rates were 64% at birth, 29% at 6 months and 16% at one year.[3]

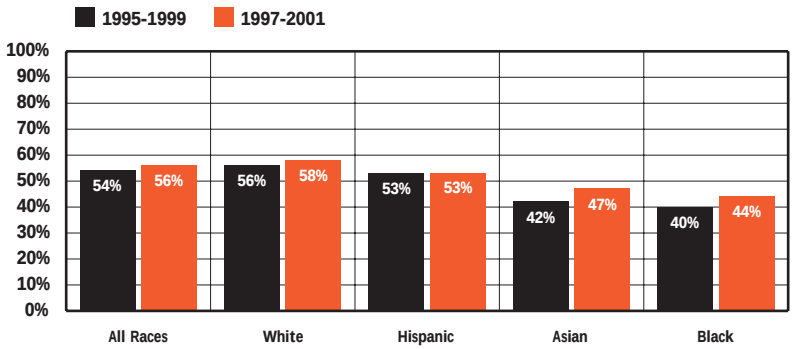
Breastfeeding provides optimal nutrition for the newborn and decreases the incidence of diarrhea, lower respiratory infections and ear infections. Breastfeeding has been linked to decreases in sudden infant death syndrome, diabetes, allergies, asthma, lymphoma and other illnesses; improved cognitive development and school performance in children; a reduced incidence of child abuse; and improved maternal health, including reduced rates of breast and ovarian cancer. [4,5,6]

Breastfeeding provides significant social and economic benefits including reduced cost to the family, reduced health care costs and reduced employee absenteeism.[7]

Nationally, the highest rates of breastfeeding, as measured by initiation in the hospital, occur among women who are White, over age 35, and college-educated. The lowest rates occur among women who are Black, less than 20 years old, have less than a 12th grade education, and participate in WIC or Medicaid.[8,9]

Breastfeeding can be effectively promoted by health professionals through culturally-appropriate prenatal and postnatal education of the mother, physician support, hospital policies that promote early and exclusive breastfeeding and provide ongoing lactation consultation, timely postpartum follow-up care, home health visits and links to lactation support networks and resources.[10]

Breastfeeding Rates by Race and Ethnicity, Rhode Island, 1995-2001



Source: Rhode Island Department of Health, Division of Family Health, Newborn Developmental Risk Screening Program, 1995-2001.

◆ During the late 1990s, most racial and ethnic groups in Rhode Island made slow, but positive progress in breastfeeding rates. The breastfeeding rates for Black and Asian infants remain significantly lower than the rates for other racial and ethnic groups.[11]

◆ Race is a strong predictor of breastfeeding even after controlling for socioeconomic background. Black women in the United States and in Rhode Island have the lowest breastfeeding rates of any racial and ethnic group.[12]

◆ The most significant obstacle to continuing to breastfeed is a mother's need to return to work.[13] Black women are more likely than women of other races to return to work early (at eight weeks after birth) and to be engaged in jobs which make continued success in breastfeeding more difficult.[14]

◆ *Healthy People 2010* recommends several strategies for increasing breastfeeding rates among those at highest risk, including increased education for health care providers and new parents, additional support of breastfeeding from employers and the community, and greater media portrayal of breastfeeding as the normal method of infant feeding.[15]

Table 13.

Breastfeeding Rates, Rhode Island, 1997-2001

CITY/TOWN	NUMBER OF BIRTHS	BREASTFEEDING	PERCENT BREASTFEEDING
Barrington	791	642	81%
Bristol	1,018	606	60%
Burrillville	750	413	55%
Central Falls	1,726	869	50%
Charlestown	489	336	69%
Coventry	1,870	1,069	57%
Cranston	3,760	1,975	53%
Cumberland	1,615	1,023	63%
East Greenwich	766	562	73%
East Providence	2,435	1,287	53%
Exeter	309	201	65%
Foster	218	151	69%
Glocester	360	219	61%
Hopkinton	725	467	64%
Jamestown	191	157	82%
Johnston	1,442	693	48%
Lincoln	877	561	64%
Little Compton	106	85	80%
Middletown	1,042	766	74%
Narragansett	584	398	68%
New Shoreham	50	39	78%
Newport	1,680	1,099	65%
North Kingstown	1,575	1,163	74%
North Providence	2,148	1,072	50%
North Smithfield	519	326	63%
Pawtucket	4,849	2,487	51%
Portsmouth	862	652	76%
Providence	13,343	6,537	49%
Richmond	171	110	64%
Scituate	600	415	69%
Smithfield	743	490	66%
South Kingstown	1,406	1,022	73%
Tiverton	337	227	67%
Warren	543	313	58%
Warwick	4,214	2,298	55%
West Greenwich	292	206	71%
West Warwick	1,986	940	47%
Westerly	1,174	712	61%
Woonsocket	2,730	1,157	42%
Unknown	*343*	*50*	*N/A*
Core Cities	*26,314*	*13,089*	*50%*
Remainder of State	*34,325*	*20,706*	*60%*
Rhode Island	*60,639*	*33,795*	*56%*

Sources of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Newborn Developmental Risk Screening Program Database, 1997-2001. Breastfeeding is defined as intended feeding method at hospital discharge. Births to Rhode Island women that occurred outside Rhode Island are not included.

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Women with Delayed Prenatal Care

DEFINITION

Women with delayed prenatal care is the percentage of women beginning prenatal care in the second or third trimester of pregnancy or receiving no prenatal care at all. Data are reported by place of mother's residence, not place of infant's birth.

SIGNIFICANCE

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 having infants who are low birthweight, who are stillborn or who die within the first year of life.[1]

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 conditions including maternal depression, smoking, substance use, domestic violence, nutritional deficiencies, and unmet needs for food and shelter.[2] Women who receive adequate prenatal care are more likely to obtain preventive health care for their children, such as scheduling well-baby visits, immunizations, and regular health checkups.[3]

Early prenatal care is especially important for women who face multiple risks for poor birth outcomes, including poverty and low maternal education. Several studies indicate that low-income women who receive enhanced prenatal care services experience improved birth outcomes. Enhanced prenatal care services may include outreach, case management, risk assessment, smoking cessation, nutritional and psychosocial counseling, health education, guidance on infant and child development, referrals to social services, and home visits.[4]

Late or No Prenatal Care

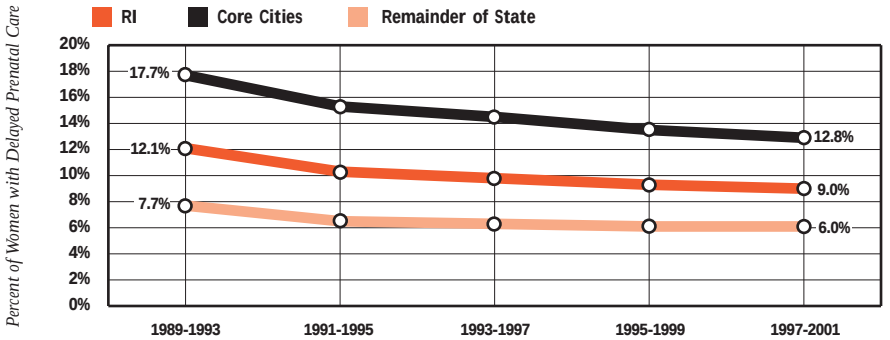
	1990	2000
RI	2.0%	1.3%
US	6.1%	3.9%
State Rank		*1st*

1st is best; 50th is worst

Late prenatal care is defined as beginning prenatal care in the third trimester.

Source: *The Right Start for America's Newborns, A Decade of City and State Trends: 1990-2000* (2003). Baltimore, MD: The Annie E. Casey Foundation.

Delayed Prenatal Care, Rhode Island, Core Cities and the Remainder of the State, 1989-2001



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1989-2001. Data for 1999-2001 are provisional. Delayed prenatal care is defined as beginning prenatal care later than the first trimester.

◆ During the 1990s, the rate of delayed prenatal care decreased across Rhode Island. However, women in the core cities remain twice as likely to receive delayed prenatal care as compared to women in the remainder of the state.[5]

◆ During 1997-2001, the women in the following communities were the least likely to receive prenatal care beginning in the first trimester of pregnancy: Central Falls (18.8%), Woonsocket (16.0%), Westerly (15.9%), Pawtucket (13.3%), Providence (12.0%), and Newport (11.4%).[6]

Smoking During Pregnancy

◆ Smoking during pregnancy increases the risk of pregnancy complications, low birthweight, stillbirth and sudden infant death syndrome (SIDS).[7] Pregnancy provides a unique opportunity to help women quit smoking. Studies have shown that providing brief medical counseling and pregnancy-tailored self-help materials during prenatal visits significantly increases quit rates.[8]

◆ In 1999, 14% of pregnant women in Rhode Island smoked cigarettes, compared to 13% nationally.[9] The percentage of Rhode Island women enrolled in RIte Care or Medicaid who smoked during pregnancy decreased significantly from 32% in 1993 to 24% in 2000.[10]

Table 14.

Delayed Prenatal Care, Rhode Island, 1997-2001

City/Town	# Births	# Delayed Care	% Delayed Care
Barrington	820	19	2.3%
Bristol	1,067	79	7.4%
Burrillville	781	53	6.8%
Central Falls	1,781	335	18.8%
Charlestown	446	39	NA
Coventry	1,924	102	5.3%
Cranston	4,171	242	5.8%
Cumberland	1,701	100	5.9%
East Greenwich	588	22	3.7%
East Providence	2,499	194	7.8%
Exeter	341	16	NA
Foster	197	11	NA
Glocester	464	28	NA
Hopkinton	488	53	NA
Jamestown	205	4	NA
Johnston	1,492	86	5.8%
Lincoln	990	57	5.8%
Little Compton	156	14	NA
Middletown	1,083	57	5.3%
Narragansett	667	21	3.1%
New Shoreham	57	9	NA
Newport	1,645	188	11.4%
North Kingstown	1,500	59	3.9%
North Providence	1,576	94	6.0%
North Smithfield	515	24	4.7%
Pawtucket	5,030	669	13.3%
Portsmouth	917	41	4.5%
Providence	13,589	1,631	12.0%
Richmond	472	30	NA
Scituate	504	27	5.4%
Smithfield	805	39	4.8%
South Kingstown	1,298	52	4.0%
Tiverton	649	58	8.9%
Warren	582	49	8.4%
Warwick	4,427	204	4.6%
West Greenwich	297	11	NA
West Warwick	2,024	171	8.4%
Westerly	1,373	218	15.9%
Woonsocket	2,980	478	16.0%
Unknown	9	0	NA
Core Cities	*27,049*	*3,472*	*12.8%*
Remainder of State	*35,061*	*2,112*	*6.0%*
Rhode Island	*62,110*	*5,584*	*9.0%*

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

NA: Percentages were not calculated for cities and towns with less than 500 births, as percentages for small denominators are statistically unreliable.

The denominator is the total number of live births to Rhode Island residents from 1997-2001.

References for Indicator

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Low Birthweight Infants

DEFINITION

Low birthweight infants is the percentage of infants born weighing under 2,500 grams (5.5 pounds). The data are reported by place of mother's residence, not place of infant's birth.

SIGNIFICANCE

A baby's birthweight is a key indicator of newborn health and is directly related to infant survival and healthy development. Infants born weighing less than 5.5 pounds are at greater risk for physical and developmental problems than infants of normal weight.[1,2] Babies are born with low birthweight for two reasons: some are born prematurely and others are small for their gestational age.[3] Increased risk of low birthweight is strongly associated with poverty, maternal smoking and low levels of educational attainment.[4]

Low birthweight babies are at higher risk of death or long-term illness and disability than infants of normal birthweight.[5] They are 24 times more likely than babies of normal weight to die within the first year of life.[6] Children ages 6 to 15 years old who were born low birthweight are 50% more likely than children of normal birthweight to be enrolled in a special education program.[7]

At almost all educational levels, socioeconomic levels, and age categories, Black mothers are at greater risk for having a preterm delivery and a low birthweight infant.[8,9] These disparities are not entirely explained by differences in income or health behaviors.[10] In Rhode Island between 1997 and 2001, the incidence of low birthweight in Black infants was nearly double the rate in White infants and was higher than all other racial/ethnic groups.[11]

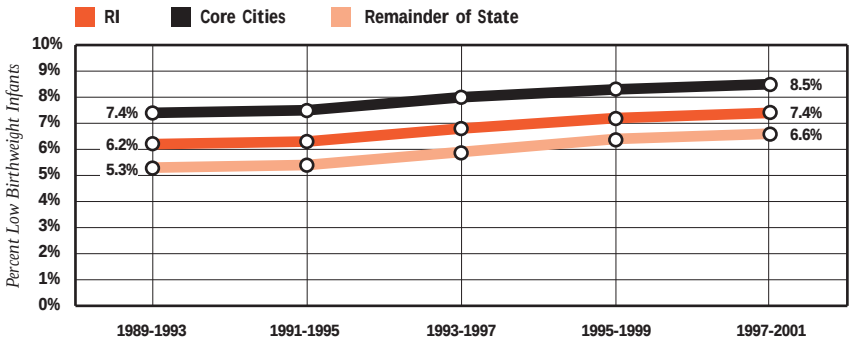
Low Birthweight Infants

	1990	2000
RI	6.2%	7.2%
US	7.0%	7.6%
State Rank		*21st*

1st is best; 50th is worst

Source: *The Right Start for America's Newborns: A Decade of City and State Trends (1990-2000)* (2002). Baltimore, MD: The Annie E. Casey Foundation.

Low Birthweight Infants, Rhode Island, Core Cities and the Remainder of the State, 1989-2001



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1989-1993, 1991-1995, 1993-1997, 1995-1999 and 1997-2001. Data for 1999-2001 are provisional.

◆ Over the past decade, the percentage of infants born low birthweight has increased in Rhode Island, the core cities and the remainder of the state. This increase has occurred across all racial and ethnic groups.[12]

◆ One reason for the increase in low birthweight infants is the growing numbers of twin, triplet and higher-order multiple births. Twins and other multiple births are more likely to be low birthweight than single births.[13] From 1997 to 2001, 6% of single births were born low birthweight, compared to 52% of twin births and 96% of triplets and higher-order multiple births in Rhode Island.[14]

Table 15. **Low Birthweight Infants, Rhode Island, 1997-2001**

CITY/TOWN	# BIRTHS	# LOW BIRTHWEIGHT	% LOW BIRTHWEIGHT
Barrington	820	38	4.6%
Bristol	1,067	72	6.7%
Burrillville	781	59	7.6%
Central Falls	1,781	150	8.4%
Charlestown	446	26	NA
Coventry	1,924	122	6.3%
Cranston	4,171	288	6.9%
Cumberland	1,701	124	7.3%
East Greenwich	588	32	5.4%
East Providence	2,499	161	6.4%
Exeter	341	15	NA
Foster	197	11	NA
Glocester	464	25	NA
Hopkinton	488	46	NA
Jamestown	205	11	NA
Johnston	1,492	118	7.9%
Lincoln	990	63	6.4%
Little Compton	156	12	NA
Middletown	1,083	46	4.2%
Narragansett	667	48	7.2%
New Shoreham	57	2	NA
Newport	1,645	100	6.1%
North Kingstown	1,500	76	5.1%
North Providence	1,576	129	8.2%
North Smithfield	515	41	8.0%
Pawtucket	5,030	393	7.8%
Portsmouth	917	57	6.2%
Providence	13,589	1,235	9.1%
Richmond	472	22	NA
Scituate	504	32	6.3%
Smithfield	805	48	6.0%
South Kingstown	1,298	71	5.5%
Tiverton	649	29	4.5%
Warren	582	49	8.4%
Warwick	4,427	342	7.7%
West Greenwich	297	10	NA
West Warwick	2,024	152	7.5%
Westerly	1373	79	5.8%
Woonsocket	2,980	240	8.1%
Unknown	*9*	*0*	*NA*
Core Cities 2000	*27,049*	*2,270*	*8.4%*
Remainder of State	*35,061*	*2,304*	*6.6%*
Rhode Island	*62,110*	*4,574*	*7.4%*

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

Core Cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

NA: Percentages were not calculated for cities and towns with less than 500 births, as percentages for small denominators are statistically unreliable.

The denominator is the total number of live births to Rhode Island residents from 1997-2001.

References for Indicator

[1,6] *KIDS COUNT Data Book: State Profiles of Child Well-Being* (2002). Baltimore, MD: The Annie E. Casey Foundation.

[2] *Maternal, Infant and Child Health in the United States (2001)*. Washington, DC: March of Dimes

[3,5,8,13] *America's Children: Key National Indicators of Well-Being 2002* (2002). Washington, DC: Federal Interagency Forum on Child and Family Statistics.

[4] *Child Health USA 2002* (2002). Rockville, MD: U.S. Department of Health and Human Services, Maternal and Child Health Bureau.

[7] Lewit, E., et al. (1995). "The Direct Cost of Low Birth Weight" in *The Future of Children: Low Birthweight*, Vol. 5, No. 1 (Spring 1995). Los Altos, CA: The Center for the Future of Children, The David and Lucile Packard Foundation.

[9,10] Shore, R. (2002). *KIDS COUNT Indicator Brief: Preventing Low Birthweight (Draft)*. Baltimore, MD: The Annie E. Casey Foundation.

[11,12,14] Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

Infant Mortality

DEFINITION

Infant mortality is the number of deaths occurring to infants under one year of age per 1,000 live births. The data are reported by place of mother's residence, not place of infant's birth.

SIGNIFICANCE

The infant mortality rate is an important measure of the well-being of infants, children and pregnant women. Infant mortality is associated with a variety of factors, including women's health status, quality and access to medical care, socioeconomic conditions, and public health practices.[1] Communities with multiple problems, such as poverty, unemployment, and illiteracy, tend to have higher infant mortality rates than more advantaged communities.[2]

During the past two decades in the United States, one in five infant deaths was caused by a birth defect. Other leading causes of infant mortality include preterm delivery, low birthweight, sudden infant death syndrome (SIDS) and respiratory distress syndrome.[3] Nationally, about a third of infant deaths occur after the first month of life.[4]

Infant mortality has two components: neonatal mortality, deaths of infants younger than 28 days, and postneonatal mortality, deaths between 28 days and one year old.[5] From 1997 to 2001, 409 Rhode Island infants died before their first birthday. Of these, 318 (78%) were neonatal deaths and 91 (22%) were postneonatal deaths.[6] Risk factors for infant mortality include lack of prenatal care and preventive care, poverty, poor living conditions, short intervals between pregnancies, inadequate maternal nutrition, smoking, alcohol and substance use, and mothers with less than 12 years of education.[7,8]

During the past decade, the proportion of infant deaths in Rhode Island attributed to maternal health increased from 50% to 63%.[9] Maternal health includes preconceptional health, perinatal care, and health behaviors. Factors contributing to this increase include an increase in the number of very low birthweight infants, an overall increase in premature births, and an increase in multiple gestation births.[10] The growth in multiple births has also contributed to the increase in premature and low birthweight births.[11]

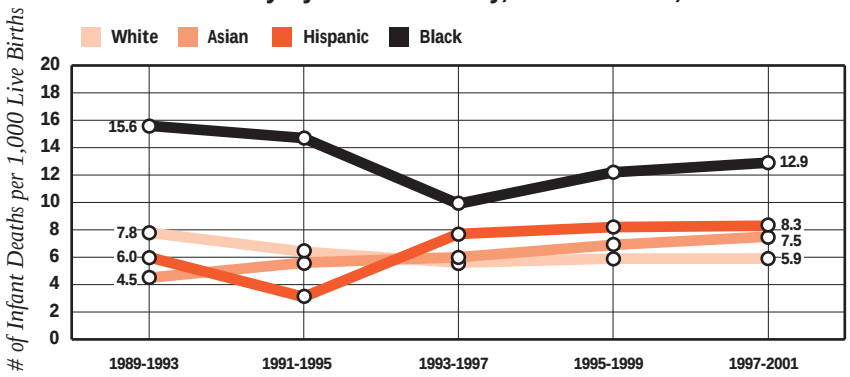
Infant Mortality Rate
(rate per 1,000 live births)

	1990	1999
RI	8.1	5.7
US	9.2	7.1
State Rank		*6th*

1st is best; 50th is worst

Source: *KIDS COUNT Data Book: State Profiles of Child Well-Being 2002* (2002). Baltimore, MD: The Annie E. Casey Foundation.

Infant Mortality by Race/Ethnicity, Rhode Island, 1989-2001



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1989-1993, 1991-1995, 1993-1997, 1995-1999 and 1997-2001. Data for 1999-2001 are provisional.

◆ Over the past decade, Rhode Island's infant mortality rate has declined for White and Black infants, but has increased for Hispanic and Asian infants. Infant mortality rates for all racial and ethnic groups except White infants have been gradually rising since 1995. The Black infant mortality rate for 1997-2001 is more than twice the rate for White infants and higher than that of any other racial and ethnic group.[12]

◆ During the 1990s, the infant mortality rate dropped 36% for infants with publicly-funded health insurance coverage and 17% for infants with private health insurance coverage. The gap in infant mortality rates between these two groups of infants was reduced by more than half.[13]

Table 16. **Number of Infant Deaths, Rhode Island, 1997-2001**

CITY/TOWN	# BIRTHS	# INFANT DEATHS	RATE/1000 BIRTHS
Barrington	820	2	2.4
Bristol	1,067	5	4.7
Burrillville	781	4	5.1
Central Falls	1,781	17	9.5
Charlestown	446	1	NA
Coventry	1,924	5	2.6
Cranston	4,171	20	4.8
Cumberland	1,701	15	8.8
East Greenwich	588	3	5.1
East Providence	2,499	13	5.2
Exeter	341	1	NA
Foster	197	3	NA
Glocester	464	2	NA
Hopkinton	488	5	NA
Jamestown	205	0	NA
Johnston	1,492	10	6.7
Lincoln	990	8	8.1
Little Compton	157	1	NA
Middletown	1,083	6	5.5
Narragansett	667	2	3.0
New Shoreham	57	1	NA
Newport	1,645	8	4.9
North Kingstown	1,500	2	1.3
North Providence	1,576	16	10.2
North Smithfield	515	1	1.9
Pawtucket	5,030	44	8.7
Portsmouth	917	5	5.5
Providence	13,589	134	9.9
Richmond	473	0	NA
Scituate	506	2	4.0
Smithfield	805	2	2.5
South Kingstown	1,298	6	4.6
Tiverton	649	1	1.5
Warren	582	4	6.9
Warwick	4,428	29	6.5
West Greenwich	297	1	NA
West Warwick	2,024	10	4.9
Westerly	1,375	7	5.1
Woonsocket	2,980	13	4.4
Unknown	*2*	*0*	*NA*
Core Cities	*27,049*	*226*	*8.4*
Remainder of State	*35,061*	*183*	*5.2*
Rhode Island	*62,110*	*409*	*6.6*

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

NA: Rates were not calculated for cities and towns with less than 500 births, as rates for small denominators are statistically unreliable.

The denominator is the total number of live births to Rhode Island residents from 1997-2001.

References for Indicator

[1,4] *America's Children: Key National Indicators of Well-Being 2002* (2002). Washington, DC: Federal Interagency Forum on Child and Family Statistics.

[2] *KIDS COUNT DATA BOOK: State Profiles in Child Well-Being 2002* (2002). Baltimore, MD: The Annie E. Casey Foundation.

[3] *Perinatal Profiles: Statistics for Monitoring Maternal and Infant Health* (2003). Washington, DC: March of Dimes.

[5] *Child Health USA 2002* (2002). Rockville, MD: Department of Health and Human Services, Maternal and Child Health Bureau.

[6, 12] Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

[7] *HHS Fact Sheet: Preventing Infant Mortality* (2001). Washington, DC: US Department of Health and Human Services.

[8] Matthews, T., et al (2002). "Infant Mortality Statistics from the 1999 Period Linked Birth/Infant Death Data Set" in *National Vital Statistics Reports*, Vol.50, No.4.

[9,10,11] Viner-Brown, S., et al (January 2003). "Infant Mortality in Rhode Island: A Time Trend Analysis" in *Medicine & Health / Rhode Island*, Vol. 86, No. 1.

[13] *RI Medicaid Research and Evaluation Reports, Issue Brief #3: Rhode Island's Infant Mortality Rate Drops Significantly in 1990s* (2002). Cranston, RI: Rhode Island Department of Human Services, Center for Child and Family Health.

Children with Lead Poisoning

DEFINITION

Children with lead poisoning is the percentage of three-year-old children screened for lead poisoning who had elevated blood lead levels (≥10ug/dL) at any time prior to December 31, 2002. These data are for children eligible to enter kindergarten in the fall of 2004 (i.e., born between September 1, 1998 and August 31, 1999).

SIGNIFICANCE

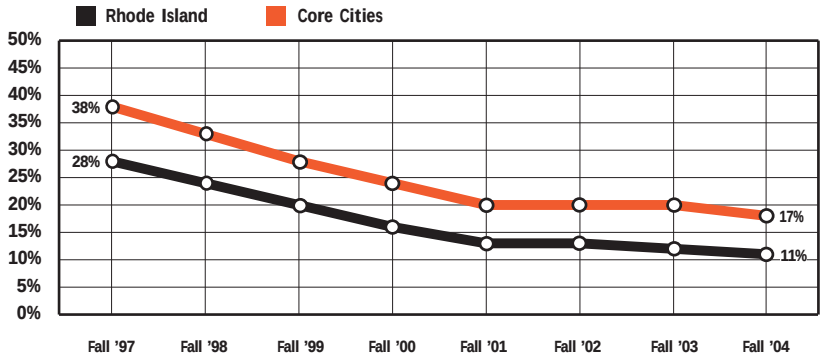
Childhood lead poisoning is one of the most common pediatric health problems, yet it is entirely preventable. Infants, toddlers and preschool age children are most susceptible to the toxic effects of lead and absorb lead more readily than adults.[1] Lead exposure can cause irreversible damage resulting in loss of intelligence, speech delay, learning disabilities, attention deficits and behavioral problems. The most acute poisoning can result in severe illness and death.[2,3] The societal costs of lead poisoning include the loss of lifetime earnings due to decreased cognition as well as medical and special education costs.[4]

All children living in homes built before 1978 – when lead paint was banned from interior use in the United States – are at risk for lead poisoning. Low-income, minority and urban children are particularly likely to be affected.[5,6] Black, Hispanic and Asian children under age 6 screened in 2002 were two to three times as likely as White children to have elevated blood lead levels.[7]

The lack of affordable housing in many communities forces many low-income families to live in older dwellings with deteriorating lead paint, placing children at increased risk for exposure to lead.[8] Inadequate nutrition and anemia, which are more common in low-income children, further increase susceptibility to lead poisoning.[9] Children in older homes undergoing renovation are also at risk.[10]

Rhode Island law requires annual blood lead level screening for all children under age 6. During 2002, 7% of all Rhode Island children under age 6 who were tested for lead exposure had elevated lead levels over 10 ug/dL.[11] Of the 2,462 Rhode Island children with elevated blood lead levels, 823 had lead levels greater than or equal to 15 ug/dL.[12] A single test result of 20 ug/dL or greater or any two tests greater than 15 ug/dL within a 3 to 12 month period trigger a mandatory inspection of the child's home. The Department of Health sends certified lead inspectors to determine whether lead hazards are present and to work with property owners to make the property lead-safe. In Rhode Island in 2002, there were 322 inspections offered; of these, 260 were performed and 62 were refused.[13]

Children Entering Kindergarten with History of Lead Poisoning, Rhode Island and Core Cities, Fall 1997- Fall 2004



Source: Rhode Island Department of Health, Office of Occupational and Radiological Health and Division of Family Health, 1995 - 2002.

◆ The number of children entering kindergarten with a history of lead poisoning has decreased throughout the state as well as in the core cities.[14] Children in the core cities (17%) are still almost three times as likely to have elevated blood lead levels as children in the remainder of the state (6%).[15] Of the 7 children hospitalized for severe lead poisoning during 2002, 5 resided in Providence and 2 in Pawtucket.[16]

◆ In 2002, the Rhode Island legislature passed the Lead Mitigation Act, comprehensive legislation that places a strong emphasis on enforcement mechanisms for lead safety in housing and strengthens tenants' rights. The Lead Mitigation Act strengthens requirements and penalties for timely abatement by landlords, requires timely referral for prosecution in the event adequate abatement is not undertaken, and creates tenant remedies to enforce the provisions of the Act through agency intervention or privately-initiated court action.[17]

◆ The Centers for Disease Control and Prevention recommends a comprehensive, multidisciplinary approach to the treatment of lead poisoning, including repeat blood tests to monitor lead levels, medical management, house inspections, removal of lead hazards, child development and social services, parent education and ongoing monitoring for developmental problems that may arise for children at key transition points such as first grade, fourth grade and middle school.[18,19]

Table 17.

Lead Poisoning in Children Entering Kindergarten in the Fall of 2004

CITY/TOWN	NUMBER TESTED FOR LEAD POISONING	# SCREENED POSITIVE >=10 UG/DL	% CHILDREN >=10 UG/DL
Barrington	211	8	3.8%
Bristol	240	13	5.4%
Burrillville	169	14	8.3%
Central Falls	376	77	20.5%
Charlestown	96	11	11.5%
Coventry	406	17	4.2%
Cranston	825	59	7.2%
Cumberland	423	19	4.5%
East Greenwich	127	7	5.5%
East Providence	492	45	9.1%
Exeter	53	4	7.5%
Foster	50	4	8.0%
Glocester	78	4	5.1%
Hopkinton	103	7	6.8%
Jamestown	45	3	6.7%
Johnston	305	9	3.0%
Lincoln	237	17	7.2%
Little Compton	35	4	11.4%
Middletown	173	14	8.1%
Narragansett	129	6	4.7%
New Shoreham	6	0	0.0%
Newport	345	71	20.6%
North Kingstown	355	23	6.5%
North Providence	273	12	4.4%
North Smithfield	116	8	6.9%
Pawtucket	1,021	136	13.3%
Portsmouth	203	19	9.4%
Providence	2,898	558	19.3%
Richmond	92	5	5.4%
Scituate	136	7	5.1%
Smithfield	163	8	4.9%
South Kingstown	328	28	8.5%
Tiverton	162	19	11.7%
Warren	124	11	8.9%
Warwick	869	43	4.9%
West Greenwich	58	0	0.0%
West Warwick	375	17	4.5%
Westerly	172	21	12.2%
Woonsocket	720	115	16.0%
Unknown Residence	*537*	*18*	*3.4%*
Core Cities	*5,735*	*974*	*17.0%*
Remainder of State	*7,791*	*487*	*6.3%*
Rhode Island	*13,526*	*1,461*	*10.8%*

Lead Poisoning Rates in Rhode Island

◆ In the core cities, 17% of the children who will enter kindergarten in the fall of 2004 have a history of lead poisoning as compared to 38% in the fall of 1997. One in five children entering kindergarten in Central Falls, Newport and Providence has a history of lead exposure.[20]

Source of Data for Table/Methodology

Rhode Island Department of Health, Office of Occupational and Radiological Health and Division of Family Health.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

Data for children entering kindergarten in the fall of 2004 reflect the number of RI children eligible to enter school in the fall of 2004 (i.e., born between 9/1/98 and 8/31/99) who screened positive for lead poisoning at any time prior to the end of December 2002. Data include both venous and capillary tests.

The denominator is the number of children entering school in the fall of 2004 who were screened for lead poisoning.

References for Indicator

[1,9] Farley, D. (January-February, 1998). "Dangers of Lead Still Linger" in *FDA Consumer,*Washington, DC: U.S. Food and Drug Administration.

[2,5,18] *Screening Young Children for Lead Poisoning: Guidelines for State and Local Public Health Officials* (November 1997). Atlanta, GA: Centers for Disease Control and Prevention.

[3,10,19] *Managing Elevated Blood Lead Levels Among Young Children* (2002). Atlanta, GA: Centers for Disease Control and Prevention.

[4] *Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards* (2000). Washington, DC: President's Task Force on Environmental Health Risks and Safety Risks to Children.

[6,8] *2002 Housing Resources Commission Annual Report* (March 2002). Providence, RI: Housing Resources Commission.

[7,14,15,20] Rhode Island Department of Health, Division of Occupational and Radiological Health and Division of Family Health. Data are for children entering kindergarten in the fall of 2004 and fall of 1997 (who screened at or above 10 ug/dL at any time up until age three).

[11,12] Rhode Island Department of Health, Division of Occupational and Radiological Health and Division of Family Health. Data are for all children under age 6 screened in 2002.

[13,16] Rhode Island Department of Health, Division of Occupational and Radiological Health and Division of Family Health, January-December 2002.

[17] The State of Rhode Island General assembly Web site: www.rilin.state.ri.us/PublicLaws/law02/law02188.htm. (February 2003).

Children with Asthma

DEFINITION

Children with asthma is the rate of asthma hospitalizations among children under age 18. Data are reported by place of child's residence at the time of hospitalization.

SIGNIFICANCE

Asthma is a chronic lung disease that causes recurrent episodes of wheezing, breathlessness, chest tightness, and cough and can be life threatening.[1,2] Attacks can be triggered by exposure to cigarette smoke, mold and dust in the home, stress, strenuous exercise, allergies, roach infestation, animal dander, indoor and outdoor pollutants, and weather conditions.[3,4] Childhood asthma in the U.S. has steadily increased over the past two decades from 40 per 1,000 children in 1982 to 108 per 1,000 children in 1999.[5,6,7] In 1999 in the United States, for every 10,000 children under age 15 there were 600 asthma outpatient visits, 110 asthma emergency room visits, and 30 asthma hospitalizations.[8]

Asthma is the number one chronic condition in children and the first-ranked cause of hospitalization in children under age 15. Asthma is the leading cause of school absences resulting from chronic illness.[9] Black children are more likely to suffer from asthma than White, non-Hispanic or Hispanic children. Racial differences in the prevalence of asthma are correlated with poverty, substandard housing, urban air quality, indoor allergens and lack of access to preventive medical care.[10,11]

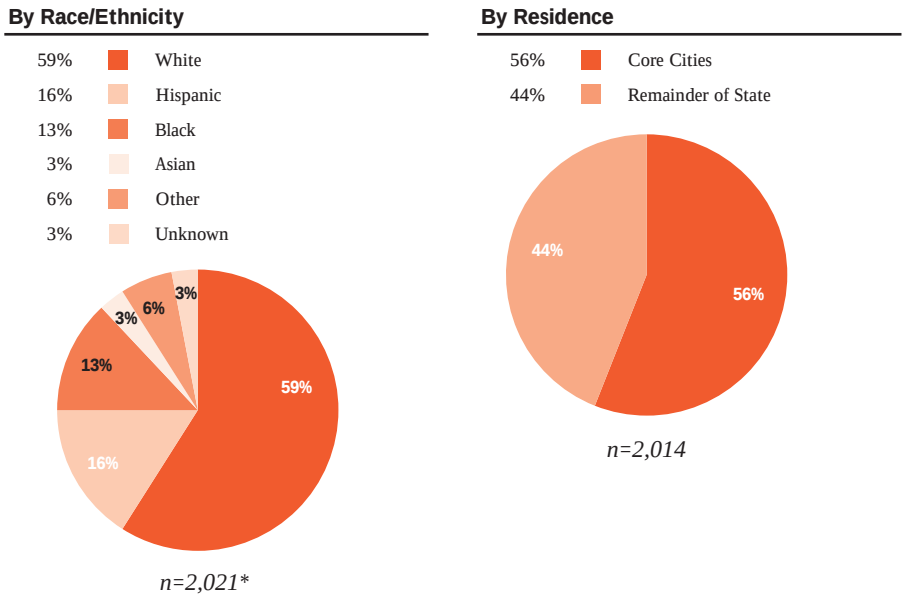
Managing asthma requires a long-term, multifaceted approach, including patient education, behavior modification, avoidance of asthma triggers, medication to minimize and prevent symptoms, prompt treatment and frequent medical follow-up.[12,13] Insured children are twice as likely as uninsured children to receive ongoing asthma care from a physician. Low-income and uninsured children are more likely to receive treatment in the emergency department or be hospitalized for conditions that could have been managed with appropriate outpatient care.[14]

Childhood Asthma Hospitalization Rates, Core Cities and Rhode Island, 1999-2001

City/Town	Number of Children Hospitalized	Rate per 1,000 Children
Central Falls	61	3.7
Newport	48	3.1
Pawtucket	165	3.0
Providence	656	4.8
West Warwick	65	3.3
Woonsocket	128	3.8
Rhode Island	2,014	2.7

Source: Rhode Island Department of Health, Hospital Discharge Database, 1999-2001.

Asthma Hospitalizations, Children Under Age 18, Rhode Island,1999-2001



Source: Rhode Island Department of Health, Hospital Discharge Database, 1999-2001.
*Includes 7 non-Rhode Island residents.

Asthma and Access to Health Care

◆ Most cases of childhood asthma can be managed by the child's primary care physician and timely medical care can prevent severe asthma attacks. Hospitalization for asthma may indicate that the child has not had adequate outpatient management of the disease.[15,16] Asthma symptoms not severe enough to require hospitalization may still prevent a child with asthma from leading a fully-active life.[17]

◆ In Rhode Island between 1999-2001, over half (56%) of all hospitalizations for childhood asthma were children residing in the core cities, where only a third of Rhode Island's children live.[18] Rhode Island's core cities have the highest child poverty rates and the highest rates of children without health insurance in the state.[19]

Table 18.

Asthma Hospitalizations for Children, Rhode Island, 1999-2001

CITY/TOWN	ESTIMATED NUMBER OF CHILDREN UNDER 18	NUMBER OF ASTHMA HOSPITALIZATIONS	RATE/1000 CHILDREN
Barrington	14,235	21	1.5
Bristol	13,197	25	1.9
Burrillville	12,129	23	1.9
Central Falls	16,593	61	3.7
Charlestown	5,136	17	3.3
Coventry	25,167	47	1.9
Cranston	51,294	121	2.4
Cumberland	23,070	29	1.3
East Greenwich	10,692	15	1.4
East Providence	31,638	70	2.2
Exeter	4,767	4	0.8
Foster	3,315	6	1.8
Glocester	7,992	8	1.0
Hopkinton	6,033	9	1.5
Jamestown	3,714	2	0.5
Johnston	17,718	37	2.1
Lincoln	15,471	25	1.6
Little Compton	2,340	2	0.9
Middletown	12,984	42	3.2
Narragansett	8,499	12	1.4
New Shoreham	555	0	0.0
Newport	15,597	48	3.1
North Kingstown	20,544	37	1.8
North Providence	17,808	45	2.5
North Smithfield	7,137	5	0.7
Pawtucket	54,453	165	3.0
Portsmouth	12,987	22	1.7
Providence	135,831	656	4.8
Richmond	6,042	10	1.7
Scituate	7,905	11	1.4
Smithfield	12,057	8	0.7
South Kingstown	18,852	32	1.7
Tiverton	10,101	12	1.2
Warren	7,362	18	2.4
Warwick	56,340	107	1.9
West Greenwich	4,332	7	1.6
West Warwick	19,896	65	3.3
Westerly	16,218	34	2.1
Woonsocket	33,465	128	3.8
Unknown Residence	*NA*	*28*	*NA*
Core Cities	*275,835*	*1,123*	*4.1*
Remainder of State	*467,631*	*891*	*1.9*
Rhode Island	*743,466*	*2,014*	*2.7*

Source of Data for Table/Methodology

Rhode Island Department of Health, Hospital Discharge Database, 1999-2001.

The data are for fiscal year 1999 and calendar year 2000 and 2001.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

The denominator is the total number of children under age 18 according to the 2000 Census of Population.

References for Indicator

[1,9] *Asthma in Children Fact Sheet* (2002). New York, NY: American Lung Association.

[2,15,17] *Asthma and the Environment: A Strategy to Protect Children* (2000). Washington, DC: President's Task Force on Environmental Health Risks and Safety Risks to Children.

[3,6,11] *Minority Lung Disease Data 2000* (2000). New York, NY: American Lung Association.

[4] Vanderslice, R. and Bibeault, L. (July 1999). "Asthma and the Environment: A Physician's Guide to Resources, Research, and Data" in *Medicine and Health/Rhode Island*, Vol. 82, No. 7. Providence, RI: Rhode Island Medical Society.

[5] *Trends in Asthma Morbidity and Mortality* (2002). New York, NY: American Lung Association.

[7] *Asthma in Children Fact Sheet* (1999). New York, NY: American Lung Association.

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Births to Teens

DEFINITION

Births to teens is the number of births to teen girls ages 15 to 17 per 1,000 teen girls. Data are reported by the mother's place of residence, not the place of the infant's birth.

SIGNIFICANCE

Teen pregnancy and parenting threatens the development of teen parents as well as their children. Teen mothers are less likely to obtain adequate prenatal care and are less likely to have the financial resources, social supports and parenting skills needed for healthy child development.[1] Children born to teen parents are more likely to suffer poor health, experience learning and behavior problems, live in poverty, go to prison or become teen parents themselves.[2]

While teen pregnancy occurs in families of all income levels, teens who give birth are more likely to come from economically-disadvantaged families and communities.[3] In the U.S., 83% of teens who give birth are from poor or low-income families.[4] Teen moms are more likely to have mothers who have completed fewer years of schooling and to have mothers or older sisters who also gave birth as adolescents.[5]

Poor academic achievement is a key predictor of teen pregnancy.[6] Nationally, three out of five teen mothers drop out of school. Being a teen parent seriously limits subsequent education and employment prospects.[7] Teen parents are more likely to delay or not finish school, putting them at greater risk of facing unemployment, low-wage jobs, and poverty.[8]

In Rhode Island between 1997 and 2001, there were 124 births to teens ages 12 to 14; 2,219 births to teens ages 15 to 17; and 4,065 births to teens ages 18 and 19. Between 1997 and 2001 in Rhode Island, 61% of teen pregnancies to girls ages 15 to19 resulted in live births, 36% resulted in abortion, and 3% resulted in miscarriage. In the core cities, 30% of pregnant teens ages 15 to 19 had abortions, compared to 47% of pregnant teens in the rest of Rhode Island. More than one in five (21%) births to teen girls ages 15 to 19 are to girls who have already given birth at least once.[9]

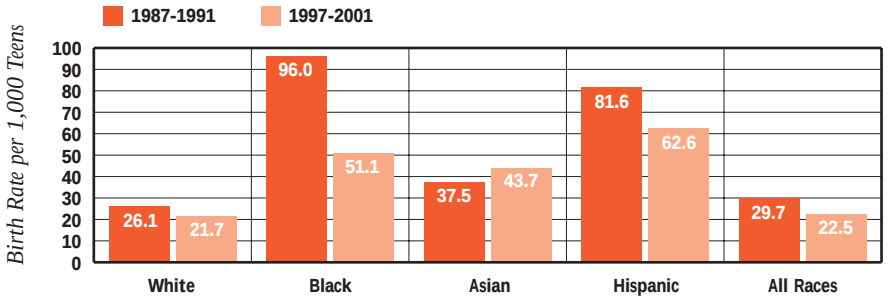
Teen Birth Rate
(births per 1,000 teens ages 15-17)

	1990	1999
RI	32	22
US	37	29
State Rank		*16th*

1st is best; 50th is worst

Source: *KIDS COUNT Data Book: State Profiles in Child Well-Being 2002* (2002). Baltimore, MD: The Annie E. Casey Foundation.

Births to Teens Ages 15-17, by Race and Ethnicity, Rhode Island, 1987-1991 and 1997-2001



◆ Between the late 1980s and the late 1990s, teen birth rates for Rhode Island girls ages 15 to 17 declined for all racial and ethnic groups except Asian, which increased by 17%. The rate for Black teens decreased by nearly 50%, compared to a 23% decrease for Hispanic teens, and a 17% decrease for White, non-Hispanic teens.

Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1987-1991 and 1997-2001. Data for 1999-2001 are provisional.

Repeat Births to Teens, Ages 12 to 19, Rhode Island, 1997-2001

Age	Total Number of Births	Number of Repeat Births	Percent
12-14	124	1	<1%
15-17	2,219	215	10%
18-19	4,065	1,077	27%
Total	*6,284*	*1,292*	*21%*

◆ Between 1997 and 2001 in Rhode Island, one in five teen births (21%) was to a teen who was already a mother. For girls ages 15-17, 10% of births were repeat births and for girls ages 18-19, more than one in four (27%) were repeat births.

Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

Table 19.

Births to Teens, Ages 15-17, Rhode Island, 1997-2001

CITY/TOWN	# OF TEEN GIRLS AGES 15-17	# OF BIRTHS TO TEENS AGES 15-17	1997-2001 RATE PER 1,000 TEENS
Barrington	2,130	3	1.4
Bristol	1,860	18	9.7
Burrillville	1,785	16	9.0
Central Falls	1,875	112	59.7
Charlestown	670	11	16.4
Coventry	3,210	45	14.0
Cranston	6,890	103	14.9
Cumberland	3,125	27	8.6
East Greenwich	1,415	4	2.8
East Providence	4,565	55	12.0
Exeter	725	7	9.7
Foster	445	4	NA
Glocester	1,145	6	5.2
Hopkinton	870	12	13.8
Jamestown	565	2	3.5
Johnston	2,295	18	7.8
Lincoln	2,190	12	5.5
Little Compton	295	0	NA
Middletown	1,370	10	7.3
Narragansett	1,265	9	7.1
New Shoreham	80	0	NA
Newport	1,990	61	30.7
North Kingstown	2,660	16	6.0
North Providence	2,470	35	14.2
North Smithfield	1,015	8	7.9
Pawtucket	6,820	224	32.8
Portsmouth	1,680	8	4.8
Providence	17,055	939	55.1
Richmond	815	10	12.3
Scituate	1,215	8	6.6
Smithfield	1,750	12	6.9
South Kingstown	2,750	22	8.0
Tiverton	1,345	11	8.2
Warren	1,000	11	11.0
Warwick	7,910	91	11.5
West Greenwich	540	3	5.6
West Warwick	2,455	63	25.7
Westerly	2,170	33	15.2
Woonsocket	4,240	190	44.8
Core Cities	*34,435*	*1,589*	*46.1*
Remainder of State	*64,215*	*630*	*9.8*
Rhode Island	*98,650*	*2,219*	*22.5*

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999–2001 are provisional.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

NA: Rates were not calculated for cities and towns with less than 500 teen girls ages 15-17, as rates for small denominators are statistically unreliable.

The denominator is the number of girls ages 15 through 17 according to the 2000 Census of Population, multiplied by five to compute a rate over five years, 1997-2001.

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Alcohol, Drug, and Cigarette Use by Teens

DEFINITION

Alcohol, drug and cigarette use by teens is the percentage of seventh-grade, ninth-grade, and twelfth-grade students who have used alcohol or marijuana in the past month or are current smokers. Seventh-grade data are taken from the *2001 Youth Tobacco Survey*. Ninth and twelfth-grade data are taken from the *2001 Rhode Island Youth Risk Behavior Survey*.

SIGNIFICANCE

While the number of adolescents using drugs and tobacco is slowly decreasing both in Rhode Island and nationwide, youth are starting to use alcohol, tobacco and illicit drugs at increasingly younger ages.[1,2,3,4] The age when young people first start using alcohol, tobacco and illicit drugs is a predictor of later alcohol and drug problems, especially if use begins before age 15.[5]

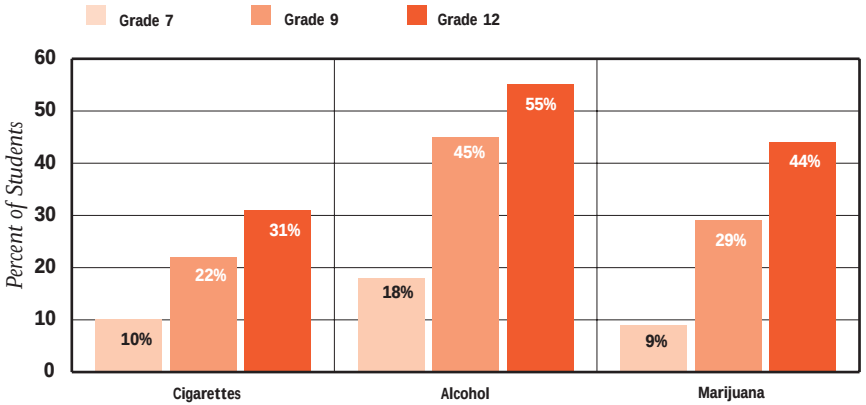
The use of substances threatens the health and safety of children, families, and communities. Of the more than 2 million deaths each year in the United States, approximately one in four is attributable to alcohol, tobacco and illicit drug use.[6] Substance use can result in family violence and mistreatment of children.[7] Prenatal exposure to alcohol, tobacco, or drugs *in utero* is linked to psychological, cognitive, and physical problems in children.[8]

Children who are not engaged in school, have high rates of school failure, lack connections with caring adults, and have feelings of peer rejection are at increased risk of substance abuse during adolescence.[9,10,11] For both cigarette and alcohol use, the greatest risk factors among youths are frequent problems with school work and the number of friends who either smoke or drink regularly.[12]

Tobacco use is the chief preventable cause of death in the United States.[13] If current smoking patterns continue, an estimated 5 million children and youths alive today will die prematurely of a smoking-related disease, of which 23,500 will be from Rhode Island.[14,15] Tobacco use among adolescents is a predictor of other drug use, especially among females.[16]

According to the National Institute on Drug Abuse, drug treatment reduces use by 40 to 60 percent.[17] Social skills training has been shown to reduce substance use in early adolescents.[18] Family and friends play critical roles in motivating substance abusers to enter treatment and maintain sobriety.[19]

Use of Cigarettes, Alcohol, and Marijuana, by Student Grade Level, Rhode Island, 2001



Student has used cigarettes, alcohol, or marijuana in the past month.

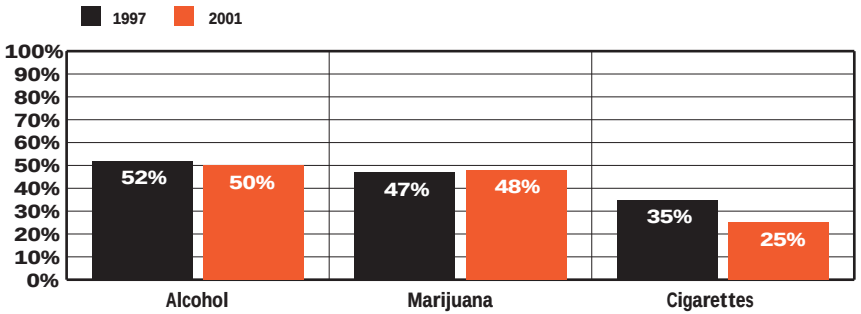
Sources: Seventh-grade data are from the *2001 Youth Tobacco Survey,* Rhode Island Department of Health, Office of Health Statistics. Ninth and twelfth-grade data are from the *2001 Rhode Island Youth Risk Behavior Survey,* Rhode Island Department of Health, Office of Health Statistics.

◆ In Rhode Island, nearly half (45%) of students have used alcohol by 9th grade and almost one in five (18%) have used alcohol by 7th grade.[20] Research indicates that more than 40% of those who start drinking at age 14 or younger will develop alcohol dependence.[21]

◆ More than one out of four sexually-active teenagers in Rhode Island used alcohol or drugs before their last sexual intercourse.[22] Teens who use alcohol are seven times more likely to have sex than teens who do not and are more likely to have sex at a younger age.[23] These teens are at greater risk of sexually-transmitted infections and/or becoming pregnant.[24]

◆ Binge drinking, defined as having five or more drinks in a row within a few hours, puts children at greater risk of school failure, suicide attempts or suicidal thoughts, and entrance into the juvenile justice system.[25] In 2001, 31% of Rhode Island teens reported binge drinking in the past 30 days. Of this group, almost half were age 15 or younger.[26]

Alcohol, Marijuana and Cigarette Use Among High School Students, Rhode Island, 1997 and 2001



Student has used cigarettes or alcohol in the past month. Student has used marijuana during lifetime.

Source: *1997 Rhode Island Youth Risk Behavior Survey* (1997) and *2001 Rhode Island Youth Risk Behavior Survey* (2001). Rhode Island Department of Health, Office of Health Statistics.

◆ Drug and alcohol use among teenagers is generally decreasing nationwide.[27,28,29] In Rhode Island, substance use in high school has leveled off or declined since 1997.[30,31]

◆ According to the SALT Survey for the 2001-2002 school year, just over one in ten (12%) middle school students reported being offered drugs at school.[32] Almost one in five (19%) high school students reported peer pressure to use drugs or tobacco.[33]

Prevention and Treatment to Combat Teen Drug Use

◆ Rhode Island received a $9 million State Incentive Grant from the federal Center for Substance Abuse and Prevention to prevent and treat teen drug use. The State Incentive Grant has three major goals: to develop a comprehensive state prevention plan; to measure progress in reducing alcohol, tobacco and other drug prevalence among youth aged 12 to 17; and to coordinate, leverage and/or redirect substance abuse prevention funding. The grant is administered by the Rhode Island Department of Mental Health, Retardation and Hospitals.[34]

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Additional Children's Health Issues

Adolescent Health Issues

Adolescents disproportionately engage in risky behaviors. As a result, these youth place themselves at greater risk of both immediate and long-term health consequences.

Health Risks and Risk Behavior Among Rhode Island Public High School Students, 2001

Driving and Alcohol	
Rode in a vehicle during the past 30 days driven by someone who had been drinking alcohol	32%
Drove a vehicle during the past 30 days after drinking alcohol	14%
Suicide	
Attempted suicide during the past 12 months	8%
Planned a suicide attempt during the past 12 months	12%
Sexual Behavior	
Ever had sexual intercourse	46%
Initiated sexual intercourse at age 13 or younger	12%
Did not use a condom during last sexual intercourse*	39%
Used drugs or alcohol before last sexual intercourse**	27%
Girls who had ever been forced to have sexual intercourse	8%

Source: *2001 Rhode Island Youth Risk Behavior Survey, Rhode Island Department of Health.*
* Question only asked for students who had sexual intercourse during the 3 months prior to the survey.
**Question only asked for sexually-active students.

Safety in Schools

◆ During the 2001-2002 school year in Rhode Island, 8% of middle school students and 8% of high school students reported experiencing violence in school. Over one-third of middle school students and over one-fourth of high school students reported fear of being hurt or bothered at school.[1] In 2001, 11% of high school students reported carrying a weapon to school.[2]

Access to Health Care in Schools

◆ In Rhode Island, an estimated 7,000 school-age children ages 6 to 18 have no health insurance.[3]

◆ Even teens with health insurance can have limited access to health care services. In 2001, half (51%) of the children and youth ages 12 to 21 who participated in the Neighborhood Health Plan of Rhode Island managed care plan did not receive a well-child visit.[4]

◆ Health care provided in schools can increase children's access to important prevention and treatment services. School-based health centers (SBHCs) are clinical primary health care sites located within schools. SBHCs offer comprehensive physical and mental health services such as treatment of colds, care for chronic conditions such as asthma and diabetes, mental/behavioral health services, substance abuse services, physical and sports examinations, reproductive health care, dental care, and immunizations. Services are free for students without health insurance.[5]

◆ SBHCs provided nearly 9,500 services to children during the 2001-2002 school year.[6] Of these, 755 were behavioral health services. This was 1,339 fewer behavioral health services than the previous year, due in part to a lack of providers.[7] Behavioral health services in schools can increase a student's ability to receive necessary social and emotional treatment and support.

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Overweight Children and Youth

◆ According to the Centers for Disease Control and Prevention, children and youth are considered overweight if their weight is above the 95th percentile for their height, age and gender. Children between the 85th and 95th percentiles are considered "at risk" for overweight.[1]

◆ Overweight in children ages 6 to 19 tripled between the early 1960s and 2000.[2] During the same time period, severe overweight almost doubled in children ages 6 to 11 and increased 64% in youth ages 12 to 17.[3]

◆ During 1999-2000 in the US, 15% of children ages 6 to 19 were overweight and another 15% were at risk for being overweight.[4] During 2001 in Rhode Island, 9% of high school students were overweight.[5]

◆ The prevalence of overweight is highest in Hispanic, Black and Native American children.[6] Children with overweight mothers, low family income, and lower levels of cognitive stimulation also have significantly elevated risk of becoming overweight.[7]

◆ Weight gain occurs when more calories are consumed than are expended.[8] On average, overweight children do not consume significantly more calories than their normal weight peers, but demonstrate a slow, consistent weight gain over several years.[9]

◆ Less than 10% of overweight in children is caused by genetic or hormonal problems.[10] Instead, most children become overweight through excessive inactivity, especially television viewing, in combination with consumption of large portions of energy-dense foods.[11]

◆ Overweight causes hypertension, heart disease, stroke, asthma, sleep apnea, type II diabetes, and orthopedic problems.[12,13] Of particular concern, the rate of type II diabetes in children, historically an adult disease, increased five-fold over the past decade.[14] Overweight children are susceptible to psychosocial problems that include depression, low self-esteem and negative self-image.[15]

Schools, Families, and Communities: Preventing Overweight Children

◆ The likelihood that overweight will persist into adulthood increases with the child's age and severity. Between 70% and 80% of overweight adolescents will remain so as adults.[16] Reducing the number of Rhode Island children who are overweight will require a comprehensive, multi-system approach shared among schools, families and communities.

◆ Pediatricians and other health care providers play a key role in early detection and intervention with overweight children. Physician-supervised treatment plans should include a moderate weight loss goal, attention to dietary management, a gradual increase in physical activity and long-term follow up.[17]

◆ Schools can get involved by integrating behavior-focused nutrition education into their curriculum, serving a variety of healthy foods, and increasing opportunities for physical activity with fitness programs, enhanced playgrounds and extracurricular activities.[18]

◆ Family involvement is critical to preventing and reducing overweight in children. Parents who model healthy eating and exercise, encourage physical activity and limit television viewing can significantly improve their children's health.[19]

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