



# Adolescence (13-21 years)

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## Maternal and Child Health Facts

**The Rhode Island Department of Health**

### Access and Utilization



#### Adolescent Well Care Visits

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

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

Adolescent Well Child Care HEDIS Data for Commercial and Medicaid Plans in RI	2006	2007	2008	2009
United HealthCare of New England	62.5%	58.3%	58.3 %	
Blue Cross Blue Shield of RI	58.7%	60.2%	61.7 %	
United HealthCare New England Medicaid	60.1%	61.3%	62.5 %	65.5 %
Blue Cross Blue Shield Medicaid		54.6%	55.9 %	58.4 %
Neighborhood Health Plan of RI		57.4%	59.1 %	63.8 %
National Commercial Benchmarks	57.8%	58.2%	59.6%	



#### Children and Health Insurance

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

(Source: Rhode Island KIDS COUNT analysis of Current Population Survey data, 2009)



### Dental Care

The federal Medicaid program mandates that states provide comprehensive dental services to eligible children up to age 21, including diagnostic and preventive services, treatment services, emergency services, and medically necessary orthodontic services.

- An average of 580 children under age 21 were treated for a dental related condition in Lifespan Emergency Departments (Rhode Island Hospital, Hasbro Children's Hospital, The Miriam Hospital and Newport Hospital) annually between Federal Fiscal Years 2004 and 2008. Three out of four (75%) of these children had private health or dental insurance, 9% had public insurance and 16% were uninsured. The total number of children treated for a dental related condition at Rhode Island Hospital has risen, from 421 in 2004 to 546 in 2008, a 30% increase.
- An average of 58 children under age 19 were hospitalized with a diagnosis that included an oral health condition each year between 2003 and 2007 in Rhode Island. On average, 13 children per year were hospitalized with an oral health condition as the main reason during this time period from 2003-2007.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Access to Dental Care)

### Immunizations

To ensure that all high school seniors are fully vaccinated before beginning college or work, the Rhode Island Immunization Program runs *Vaccinate Before You Graduate (VBYG)* in high schools throughout the state. The program informs parents and students of the importance of immunization and holds vaccination clinics throughout the year at each participating school. The immunizations are funded by the state's Vaccines for Children program and are offered at no cost to students.

- During the 2007-2008 school year, 69 schools participated in VBYG. Of the 1,505 students enrolled in the program, 97% received one or more immunizations and 76% completed all immunizations for which they were enrolled. The shots administered included hepatitis B, MMR, Tdap, meningococcal, varicella (chicken pox), polio, influenza, and the human papillomavirus vaccine.

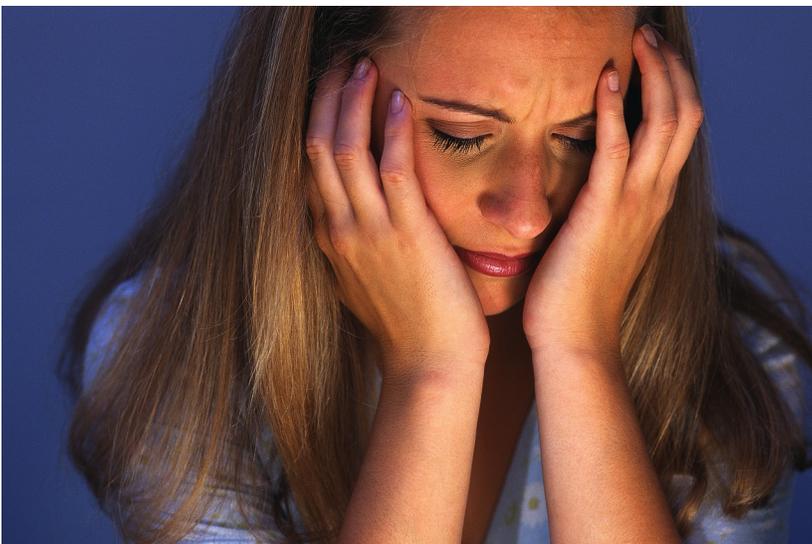
(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Childhood Immunizations)

### Mental Health Treatment and Prevention

One in five children ages nine to 17 in Rhode Island and in the United States has a diagnosable mental health disorder, and one in ten has a mental health problem that is severe enough to substantially interfere with their functioning at home, in school, or in the community. Despite the high rates of mental health disorders among children, four out of five children do not receive needed treatment and those that do often receive treatment in a setting that does not best meet their needs or the needs of their families.

- Between 2006 and 2009 in Rhode Island, spending on psychiatric hospitalizations for children with health insurance through RItE Care or Medical Assistance decreased by 22%, from \$22.6M to \$17.6M. The spending per child hospitalized decreased by 32%, from \$34,298 to \$23,465, largely due to reductions in length of stay. Children with private insurance accounted for 58% (977) of the hospitalizations in 2008, while children with public insurance, such as RItE Care or fee-for-service Medicaid accounted for the remaining 42% (719).

(Source: 2010 Rhode Island KIDS COUNT Issue Brief: Children's Behavioral Health: Psychiatric Hospitalizations and the Continuum of Care)



- Children and adolescents receive a range of behavioral health treatment services at hospitals in Rhode Island, ranging from inpatient treatment at a psychiatric hospital or a general acute care hospital to outpatient treatment services. For example, Hasbro Children's Hospital, a division of Rhode Island Hospital, provided 7,555 outpatient psychiatry visits to 1,773 children and youth under age 19 in 2008.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children's Mental Health.)

- According to the Rhode Island Youth Risk Behavior Survey (YRBS), in 2007, 7% of public school students reported attempting suicide in the last 12 months. For students having a disability (physical, learning or emotional problems), 17% reported the same. 16% of high school students reported feeling sad or hopeless in the past 12 months compared with 41% of students reporting a disability. In the same survey, 31% of students who identified themselves as "gay, lesbian, bisexual or unsure" reported attempted suicide compared to 7% of heterosexual students. Additionally, 50% of students who were lesbian, gay, bisexual, or unsure reported feeling sad or hopeless compared with 21% of heterosexual students.

### Homeless Adolescents

Studies of homeless youth have found that 40% to 60% of homeless youth have been physically abused, and 20% to 50% have been sexually abused in their homes. One study found that between 20% and 40% of homeless youth identify themselves as gay, lesbian, bisexual, or transgender, and many homeless youth are forced out of their homes by parents who disapprove of their sexual orientation.

- Between July 1, 2007 and June 30, 2008, 264 youths ages 13-17 entered the Rhode Island Emergency Shelter system accompanied by a parent or another adult.
- Rhode Island has a limited number of beds designated for runaway and unaccompanied homeless youth. Between October 1, 2007 and September 30, 2008, 15 unaccompanied youth received Basic Center services (up to 15 days of shelter) and seven received Transitional Living services (up to 18 months of housing and supportive services).
- As of December 31, 2008, there were 81 youth in the care of the Rhode Island Department of Children, Youth and Families who were classified as unauthorized absences/runaways.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Homeless Youth)

## Health Practices and Behavior

### Nutrition and Physical Activity

Nationally, the weekly recommended amount of physical education is 150 minutes in elementary school and 225 minutes in middle school and high school. Rhode Island state mandates are much lower than these amounts (health education and physical education totaling 100 minutes per week for children in grades one through 12). Four out of five (79%) Rhode Island high school students reported attending physical education classes on one or more days in an average week in 2007.

(Source: <http://www.cdc.gov/obesity/stateprograms/index.html>)

### Tobacco Use

According to the 2007 Rhode Island Youth Risk Behavior Survey, the percentage of Rhode Island high school students who reported smoking cigarettes during at least 1 day during the previous 30 was 15.1%, compared to 20.0% nationally.

According to the Rhode Island School Accountability for Learning and Teaching (SALT) Student Survey, after an initial drop during the period between 1999/2000 through 2001/2002 (29%-23%) the percentage of high school students reporting smoking cigarettes in the previous 30 days have remained steady through 2007/2008. The percentage of middle school students reporting cigarette use in the previous 30 days went from 14%-8% after an initial drop during the same time period (1999/2000 through 2001/2002) and also remained steady through 2007/2008.



## Substance Abuse

In 2007, approximately 8% of youth ages 12-17 in the U.S. met standard diagnostic criteria indicating the need for treatment for an alcohol and/or illicit drug use problem. Few of these youth received specialty treatment (6% of those needing treatment received specialty alcohol treatment and 10% received specialty illicit drug use treatment).

Nationally in 2006 and 2007, 26% of youth ages 12-20 reported obtaining alcohol for free from a non-relative aged 21 or over, 15% from another underage person, 6% from a parent or guardian, 9% from another relative aged 21 or older, and 4% reported taking it from their own home without permission.

Over the past decade, there has been a decline in reported use of alcohol and illegal drugs among Rhode Island middle school and high school students. In the 2007-2008 school year, as was the case in previous years, students in school districts in the core cities report lower use of alcohol, tobacco and cigarettes than do students in the remainder of the state.

*(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Alcohol, Cigarette, and Drug Use Among Teens)*

## Condom Use

According to the 2007 Rhode Island Youth Risk Behavior Survey, the percentage of Rhode Island high school students (who are currently sexually active) who reported using a condom during the last time they had sexual intercourse was 34%, compared to 38.5% nationally.

Preferences of contraceptive choices can be seen among Title X-funded family planning agencies. In 2008, the preferred contraceptive methods among Title X clients were: oral contraceptives (21%), male condoms (15%), female sterilization (11%), abstinence (8%), injection (8%), IUD (6%), other methods (5%), hormonal patch (3%), ring (2%), fertility awareness (1%), vasectomy (1%), and sponge, Diaphragm, cervical cap, female condom, implant, or spermicide (0.5%). Of the 3,781 clients using no method, 60% were pregnant, 19% were seeking pregnancy, 6% were males relying on their female partner's method, and 15% cited some other reason for not using a method.

*(Source: Rhode Island Department of Health Program Data)*



## Teen Dating Violence

According to the 2007 Rhode Island Youth Risk Behavior Survey, the number of youth who reported being hit, kicked, or slapped by a dating partner increased by more than 30% in the past two years alone. Teen dating violence affects youth from all socio-economic, racial, and ethnic groups; claims victims and per-predators of both genders; and occurs in heterosexual, gay, and lesbian relationships. The social, psychological, and physical health repercussions are severe and persistent with a recent study linking dating violence to increased substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicide.

# Health Status

## Family Planning Services

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

- In 2008, the Family Planning Program served 2,677 adolescents less than 18 years of age. Of the 2,677 adolescents served, 73% were females and 24% were males. Twenty-one percent (21%) belonged to a racial minority group and 34% reported themselves as Latino. Seventy-four percent (74%) had incomes at or below 200% of the federal poverty level.

*(Source: Rhode Island Department of Health Program Data)*

## Health Status

### Late Initiation of or No Prenatal Care

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

Pregnant adolescents in Rhode Island are the most likely to delay prenatal care. Between 2003 and 2007, one quarter (24.9%) of pregnant teens ages 19 and under received delayed prenatal care, compared with 10.9% of women ages 20 and over.

*(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Women with Delayed Prenatal Care)*



### Births to Teens

The United States ranks number one in the industrialized world for teen pregnancy and birth rates. Teen pregnancy and parenting threaten the development of teen parents as well as their children. Once a teenager has a baby, she is at increased risk of having another as a teen. A repeat birth during the teen years compounds educational, economic and health problems for both the mothers and the children. Babies born to teen mothers are at increased risk for low birthweight, prematurity, and death in infancy. Children of teen parents are more likely to experience learning and behavior problems in school, live in poverty, enter the foster care system, drop out of high school, and spend time in prison.

- In 2007 in Rhode Island, there were 1,206 babies born to mothers under age 20, accounting for almost 10% of all babies born in the state. Rhode Island ranks 22nd in the U.S. for births to younger teens ages 15 to 17.
- Since the early 1990s, the teen birth rate for Rhode Island girls ages 15-19 has declined by 22%, mirroring the overall national trend. Between 1991 and 2005, the U.S. teen birth rate fell by 34%. However, U.S. teen birth rates rose by 3% in 2006.
- The decline in both teen pregnancy and birth rates has been attributed to improved use of contraception among those teens who are sexually active (accounting for 86% of the decline) and reduced sexual activity (accounting for 14% of the decline).
- Of all births to Rhode Island teens ages 15 to 19 between 2003 and 2007, 70% occurred in the core cities, the six communities with the highest child poverty rates.

*(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Births to Teens)*

### Infant Mortality Rate (IMR) Among Adolescents

Infant mortality rate is also called the infant death rate. It is the number of deaths that occur in the first year of life for 1000 live births. IMR is an important measure of the well-being of infants, children, and pregnant women. Infant mortality is associated with a variety of factors, including health status of women, quality of and access to medical care, socio-economic conditions, and public health practices.

- The overall infant mortality rate in Rhode Island for 2003-2007 was 6.3 deaths per 1,000 births. The infant mortality rate was 58% higher in the core cities than in the remainder of the state.
- In Rhode Island between 2003 and 2007, the Black infant mortality rate was 12.1 deaths per 1,000 births, the Asian infant mortality rate was 6.6 per 1,000 births and the Native American infant mortality rate was 11.4 per 1,000 births. All minority groups had infant mortality rates greater than the rate for White infants (5.5 per 1,000 births). The Hispanic infant mortality rate was 8.3 per 1,000 births compared with 7.2 deaths per 1,000 births among non-Hispanic infants in Rhode Island.

- Pregnant adolescents in Rhode Island are the most likely to delay prenatal care. Between 2003 and 2007, one quarter (24.9%) of teens ages 19 and under received delayed prenatal care, compared with 10.9% of women ages 20 and over.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Infant Mortality)

### Preterm Births

Women under age 20 and over age 35 have the highest preterm birth rates in Rhode Island. The rate of preterm births among women under age 20 between 2003 and 2007 was 13.6%. The preterm birth rate was 22.6% for 12-14 year olds, 15.1% for 15-17 year olds and 12.7% for 18-19 year olds.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Preterm Births)

### Low Birth Weights

Nationally and in Rhode Island, the rate of low birthweight infant births is higher for women under the age of 20 than for older women and is particularly high for girls who give birth under age 15. Between 2003 and 2007 in Rhode Island, the percentage of low birthweight infants born to mothers under the age of 20 was 10.4%, compared to 7.9% for mothers age 20 and above.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Low Birthweight Infants)

### Chronic Disease

#### Asthma

In Rhode Island, more than one in 10 (11%) children under age 18 reported having asthma between 2001 and 2005. Only four states report higher current asthma prevalence rates. Children ages 13-17 accounted for 20% of hospitalizations.

- Between 2003 and 2007, the rate of asthma hospitalizations for Black children (under 18 years old) in Rhode Island was more than three times the rate of hospitalizations for White children and the rate for Hispanic children was more than twice the rate for White children. The rate of asthma hospitalizations among Black children has risen from 8.0 per 1,000 in 2000-2004 to 9.6 per 1,000 in 2003-2007 and the rate among Hispanic children in Rhode Island has increased from 4.9 per 1,000 in 2000-2004 to 6.4 per 1,000 in 2003-2007.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Children with Asthma)



### Obesity

Adolescents who are overweight have a 70% chance of becoming overweight or obese adults, with increased health risks and higher health care costs than those at a healthy weight.



- The 2003 National Survey of Children's Health indicated that 31% of Rhode Island children ages 6-17 were either overweight (15%) or obese (16%). In 2007, 11% of high school students were obese.

- In the U.S., non-Hispanic White adolescents who live in families with lower incomes have a greater prevalence of being overweight than those who live in higher-income families. Income is not correlated with obesity for non-Hispanic Black or Mexican-American youth.

(Source: 2009 Rhode Island KIDS COUNT Factbook / Indicator: Overweight Children and Youth)

## Diabetes

According to the Centers for Disease Control and Prevention's diabetes statistics on children and adolescents in North America, those diagnosed with type 2 diabetes are generally between 10 and 19 years old, obese, insulin-resistant, have a strong family history for type 2 diabetes and Acanthosis Nigricans (a dark brown-looking, thick skin lesion that appears on the neck, underarm or groin area). All ethnic groups suffer from type 2, but American Indian youth have the highest prevalence in the U.S.

(Source: <http://www.cdc.gov/diabetes/projects/cda2.htm>)

## HIV

Between January 1, 2000 and December 31, 2007, there were 1102 Rhode Island residents newly diagnosed with HIV and reported to the Rhode Island Department of Health. This number provides a minimum estimate of HIV infection, as it does not include those HIV infected individuals who have not been tested yet and those who get tested Anonymously. According to the Centers for Disease Control and Prevention (CDC) at the end of 2006, 448,871 people were living with AIDS and 1039,000-1185,000 people were living with HIV and AIDS in the United States. Based on this estimate the estimated number of people living with HIV and AIDS in Rhode Island in 2007 is between 3766-4295.

- Thirteen percent (141 out of 1101) of all the HIV cases diagnosed in Rhode Island in the period from January 1, 2000 to December 31, 2007 occurred in individuals 13 – 24 years of age. There has been a steady rise in the incidence of HIV among this age group in the past couple of years, with a slight decrease in 2005.
- Of the 141 cases diagnosed among youth in Rhode Island, 83 were males and 58 were females. Youth of racial and ethnic minorities were heavily impacted with 33% occurring in African American youth, 22% occurring in Hispanic youth and 44% occurring in White youth among the new cases in Rhode Island in 2007.
- Among Rhode Island males, Men who Have Sex with Men (66%) was the most common risk category followed by No specified Risk (22%). Among Rhode Island females, Heterosexual Contact (43%) was the most common risk category closely followed by No specified risk (42%).

(Source: 2008 Rhode Island Department of Health HIV/AIDS Epidemiologic Profile)



## Additional Resources

For additional information about the materials presented in this, or any other data brief, please visit the Rhode Island Department of Health Website at:

[www.health.ri.gov/](http://www.health.ri.gov/)

Or, to view the most recent publications from the Rhode Island Department of Health:

<http://www.health.ri.gov/publications/>

For additional information on any of the indicators presented in this, or any other data brief, as well as additional indicators, please visit Rhode Island KIDS COUNT at:

<http://www.rikidscount.org/matriarch/default.asp>