



Pregnant Women

Maternal and Child Health Facts

The Rhode Island Department of Health

Access and Utilization



WIC Enrollment

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

WIC participation has been shown to reduce infant mortality (especially neonatal mortality), improve birth outcomes (including reducing the likelihood of low birthweight), protect against under-

weight and poor nutrition in infants, prevent overweight in young children, increase immunization rates, improve cognitive development, and increase the likelihood of having a source of regular medical care.

- As of September 30, 2008, 28,810 women, infants and children participated in the Rhode Island WIC Program. Among these participants, 16% were pregnant women, 7% were postpartum women, 23% were infants, and 54% were children aged 1-4. Nearly two thirds (66%) of the participants were White, 17% were Black/African American, 3% were Asian, and 14% were of other or multiple races. More than one-third (36%) of the participants were of Hispanic/Latino ethnicity. Among the 28,810 participants, 20,089 (69.7%) lived in the core cities. Participation rates in the WIC Program have been increasing and in 2008, 78% of those eligible statewide were enrolled in the program. This figure is higher among those living in the core cities with 84% of those eligible participating in the program.

(Source: Rhode Island Department of Health WIC Program Data and 2009 Rhode Island KIDS COUNT Factbook / Indicator: Women and Children Receiving WIC)

Late Initiation of Or No Prenatal Care

Early prenatal care is important to identify and treat health problems and influence health behaviors that can compromise fetal development, infant health and maternal health. Women receiving late or no prenatal care are at increased risk of poor birth outcomes such as having babies who are stillborn, low birthweight or who die within the first year of life. Prenatal care offers the opportunity to screen for and treat conditions that increase the risk for poor birth outcomes. Effective prenatal care also screens for and intervenes with a range of maternal needs including nutritional needs, social support, mental health, substance use, domestic violence, and unmet needs for food and shelter.

- In Rhode Island between 2003 and 2007, 12.1% of women giving birth either received no prenatal care or did not begin care until the second or third trimester, up from 9.4% in 2001-2005.
- Between 2003 and 2007 in Rhode Island, Asian women (21.1%), Black women (19.3%), Native American women (19.8%) and Hispanic women (16.3%) were significantly more likely to receive delayed prenatal care than White women (10.7%).
- Between 2003 and 2007, the rate of delayed prenatal care in the core cities (16.0%) was nearly twice the rate in the remainder of the state (8.8%). Newport was the only core city with a rate of delayed prenatal care (11.9%) better than the state rate (12.1%).

- Between 2003 and 2007, uninsured women in Rhode Island were nearly two and a half times more likely to receive delayed prenatal care (44.4%) as women enrolled in RItE Care (18.4%). Between 1995 and 2005, the percentage of women enrolled in RItE Care or Medicaid who began prenatal care in the first trimester increased from 80.4% to 83.8%.

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

Prevention of Birth Defects: Folic Acid Consumption

During 2004-2007, more than half (51.1%) of the Pregnancy Risk Assessment Monitoring System (PRAMS) survey respondents reported they had not taken a multivitamin during the month before they got pregnant. However, between 2004 and 2007, this figure fluctuated, rising from 47.6% in 2004 to 53.9% in 2006, and then dropping to 50.9% in 2007. Respondents were more like not to have taken a multivitamin if they were aged less than 20 (70%), had household incomes of less than \$10,000 (69.5%), were single (69.2%), had less than a high school education (68.8%), had public insurance (68.7%) or were of Hispanic ethnicity (65.1%).

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

(Source: Rhode Island Department of Health Program Data)

Genetic Counseling and Testing

- During 2004-2007, 73.4% of PRAMS survey respondents indicated they were aware that their babies were tested in the hospital for genetic conditions. This figure varies by maternal demographics, where women were less likely to be aware of the testing if they were of Hispanic ethnicity (57.5%), household incomes less than \$25K (66.7%), had public insurance (67.7%) or were less educated (69.0%).
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Health Status

Pregnancy Rates

In Rhode Island, during 2007, there were 16,615 pregnancies among women aged 15-44, which resulted in 12,328 (74.2%) live births, 3,651 (22.0%) induced abortions, and 636 (3.8%) spontaneous abortions. Between 2006 and 2007, the pregnancy rate decreased by 1.7%, from 74.6 to 73.3. Data for 2008 indicate that the number of births among Rhode Island residents decreased to 12,032 births, representing a 2.7% decline from 2007.

- The overall multiple birth rate (includes twins, triplet and higher order births) among Rhode Island residents has decreased to 35.2 per 1,000 according to 2007 data. This rate represents a 16.4% decrease from 2003, when the rate was 42.1. During 2007, there were 435 twin and triplet babies among the 12,365 births compared to 556 multiples among the 13,202 babies born in 2003. During 2005, Rhode Island's multiple rate (40.6) continued to be higher than the US rate (33.8).
- The cesarean section rate continues to rise nationally and in RI; nearly one in three RI babies are delivered via cesarean.

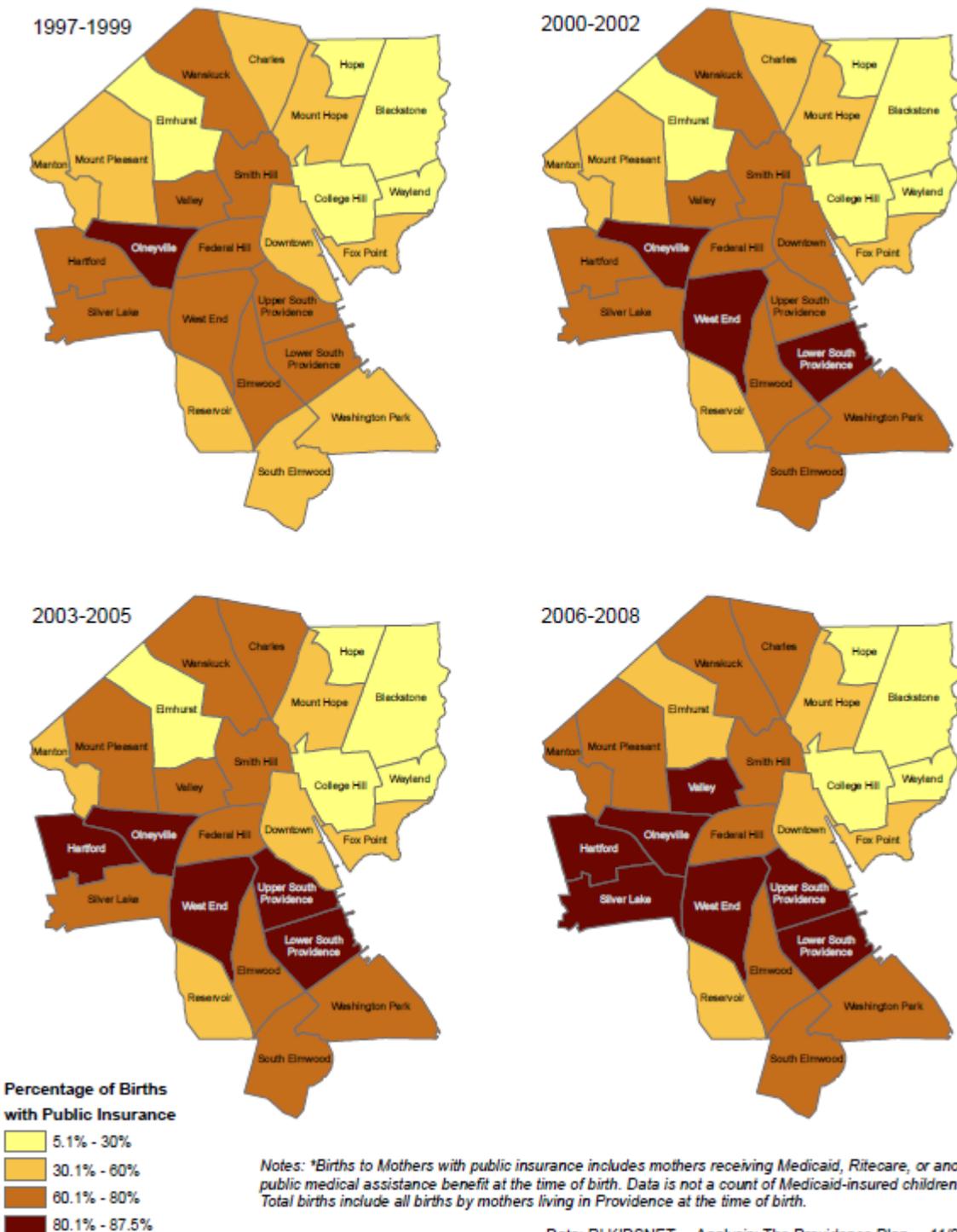
(Source: Rhode Island Department of Health Data)

Births Financed by Medicaid

In 2007, the number of births financed by Medicaid in Rhode Island was 5,657, or 47%. Only a decade earlier, in 1997, Medicaid births accounted for 30% of the 12,076 resident births, or 3,619 births.

(Source: RI Medicaid Research and Evaluation Project, DHS, Vital Statistics Birth File, RI Department of Health, CY 1995-2007)

Births to Mothers with Public Insurance* as a Percentage of Total Births, by Providence Neighborhood



Infant Mortality Rate (IMR)

Infant mortality rate is also called the infant death rate. It is the number of deaths that occur in the first year of life for 1000 live births. IMR. IMR is an important measure of the well-being of infants, children, and pregnant women. Infant mortality is associated with a variety of factors, including health status of women, quality of and access to medical care, socio-economic conditions, and public health practices.¹ Communities with multiple problems such as poverty, unemployment and low literacy levels tend to have higher infant mortality rates than more advantaged communities. The two chief causes of infant death are low birthweight (particularly births at less than 750 grams) and prematurity.

- The overall infant mortality rate in Rhode Island for 2003-2007 was 6.3 deaths per 1,000 births. The infant mortality rate was 58% higher in the core cities than in the remainder of the state.
- The infant mortality rate in the U.S. has declined significantly in recent decades from 26.0 deaths per 1,000 births in 1960 to 6.9 deaths per 1,000 births in 2005.
- Preterm births are a major determinant of infant mortality in the U.S. In Rhode Island between 2003 and 2007 there were 7,610 preterm births (12% of all births).
- In Rhode Island between 2003 and 2007, the Black infant mortality rate was 12.1 deaths per 1,000 births, the Asian infant mortality rate was 6.6 per 1,000 births and the Native American infant mortality rate was 11.4 per 1,000 births. All minority groups had infant mortality rates greater than the rate for White infants (5.5 per 1,000 births). The Hispanic infant mortality rate was 8.3 per 1,000 births compared with 7.2 deaths per 1,000 births among non-Hispanic infants in Rhode Island.

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

Low Birthweight

An infant's birthweight is a key indicator of newborn health. Infants born weighing less than 5 pounds, 8 ounces are at greater risk for physical and developmental problems than infants born at normal weights. Increased risk of low birthweight is associated with maternal poverty, smoking and low levels of educational attainment.

- In Rhode Island between 2003 and 2007, 2% (1,035) of all infants born were very low birthweight (less than 1,500 grams).
- Over the past decade, the percentage of low birthweight infants has increased in Rhode Island and in the U.S., with particular disparities existing by race and ethnicity. In Rhode Island between 2003 and 2007, 13.8% of Native American infants, 11.1% of Black infants, 9.6% of Asian infants, and 8.3% of Hispanic infants were born with low birthweight, compared to 7.6% of White infants.
- Nationally and in Rhode Island, the rate of low birthweight infant births is higher for women under the age of 20 than for older women and is particularly high for girls who give birth under age. Between 2003 and 2007 in Rhode Island, the percentage of low birthweight infants born to mothers under the age of 20 was 10.4%, compared to 7.9% for mothers age 20 and above.

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

Birth Defects and Maternal Characteristics

According to 2003-2007 Rhode Island birth defects data, women who are 35 and older (523.9 per 10,000 live births), with less than a high school education (507.1), or no health insurance in Rhode Island (578.1) are at higher risk for having a newborn with a birth defect. It should be noted that since there were only 37 birth defects cases with no health insurance, reducing the statistical significance of the rate. Women with public health insurance were more likely to have a baby with a birth defect (523.6) compared to women with private insurance (424.4).



Racial/Ethnic and Geographic Disparities

- Data for the period 2003-2007 show that disparities in birth defects rates by race and ethnicity continue to persist in Rhode Island. Specifically, Black/African American women (595.8 per 10,000 live births) and those of Hispanic/Latino ethnicity (579.0) were more likely to have a newborn with a birth defect compared to Asian (401.2) and White (432.7) women.
- In Rhode Island during 2003-2007, the birth defects rate continues to be higher among women residing in the core cities (504.6 per 10,000 live births) than women living in the rest of the state (439.7). Rates were highest among those living in Pawtucket (596.6) and Central Falls (559.5).

(Source: Rhode Island Department of Health birth defects data)

Breast Feeding Rates

The American Academy of Pediatrics (AAP) identifies breastfeeding as the ideal method of feeding and nurturing infants and recognizes breastfeeding as a critical component in achieving optimal infant and child health, growth and development. Rhode Island tracks breastfeeding rates and infant feeding practices with its Pregnancy Risk Assessment Monitoring System (PRAMS), which was implemented in 2002.



- Between 2003 and 2007, more than half (57%) of all women who gave birth in Rhode Island chose to exclusively breastfeed their children, almost one-third (28%) chose to exclusively formula feed, and 12% chose to use a combination of breast and formula feeding. Of new mothers in Rhode Island between 2004 and 2007 who were surveyed approximately three months after giving birth, 73% reported having ever breastfed. Fifty two percent of these mothers reported continued breastfeeding at the time of the survey.
- In Rhode Island between 2006 and 2007, Black and Hispanic mothers were less likely to exclusively breastfeed than their Asian and White peers. However, Hispanic and Asian mothers were more likely to report any breastfeeding than women in other racial and ethnic groups.

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

Prenatal and Post-Partum Depression

During 2007, 7.9% of Pregnancy Risk Assessment Monitoring System (PRAMS) respondents reported they had been diagnosed with depression during their pregnancy. This represents a 16% increase from the 2006 rate of 9.4%. Approximately half (52.0%) of the women who were diagnosed with depression were taking prescription medications for their depression, and more than two-thirds (77.0%) were provided with information about the risks and benefits of taking these medications during pregnancy. Additionally, 63.6% of the women who were diagnosed with depression reported they had received counseling for their depression.

- Women were more likely to have a hard time during pregnancy if their pregnancy was unintended (33.6%), their household income was <\$10,000 (32.2%), they had a low birth weight infant (30.6%), they were single (26.9%), they had public insurance (24.4%), or they were aged less than 20 (23.4%).

(Source: Rhode Island Department of Health PRAMS data)

Pregnancy and Tobacco Use

According to the Rhode Island Department of Health, Maternal and Child Health Database, women who smoked during pregnancy were more likely to have a low birth weight and/or preterm baby compared to women who did not smoke during pregnancy. According to 2007 data, the rate of tobacco use during pregnancy among Rhode Island women rose to 11.2% from 10.6% in 2006. Since 1990, the rate of tobacco use during pregnancy among Rhode Islanders (22.5%) declined by 52.9% and by 27.4% since 2000 (14.6%).

- Additionally, between 2006 and 2007, rates of low birth weight and prematurity rose among women who smoked during pregnancy compared to women who did not smoke. During 2007, women who smoked during pregnancy were nearly twice as likely to have a low birth weight baby (13.8%) compared to women who did not smoke (7.1%).
- In 2007, women aged 20-24 (18.0%) and teens aged 15-19 (17.4%) continue to have the highest rates of tobacco use during pregnancy, while women aged 35-39 (5.3%) and 40-44 (6.5%) had the lowest rates. Native Americans continue to have the highest rates of tobacco use during pregnancy (24.7%), although the rate represents a decrease from 2006 (29.9%). The rates among Whites (11.5%) and Black/African Americans (11.0%) continue to be high and also represent increases from 2006 (10.8% and 9.5%, respectively).

(Source: Rhode Island Department of Health Maternal and Child Health Database)



Additional Resources

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

Or, to view the most recent publications from the Rhode Island Department of Health:
<http://www.health.ri.gov/publications/>

For additional information on any of the indicators presented in this, or any other data brief, as well as additional indicators, please visit Rhode Island KIDS COUNT at:
<http://www.rikidscount.org/matriarch/default.asp>