

Low Birthweight Infants

DEFINITION

Low birthweight infants is the percentage of infants born weighing less than 2,500 grams (5 pounds, 8 ounces). The data are reported by place of mother's residence, not place of infant's birth.

SIGNIFICANCE

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.¹ Increased risk of low birthweight is associated with maternal poverty, smoking and low levels of educational attainment.²

Low birthweight is often the result of a premature birth but can also occur after a full-term pregnancy. In 2006 in the U.S., 66% of all low birthweight infants were born prematurely (under 37 weeks gestation) while 31% were born full-term (37 to 41 weeks gestation) and 2% were born post-term (over 41 weeks gestation).³

The percentage of babies born at low birthweight has increased 24% since the mid-1990s and is currently at the highest level recorded in the past four decades.⁴ A significant climb in the rate of multiple births has strongly influenced the increase in the percentage of low birthweight babies.

The data show that low birthweights also are on the increase among single-infant deliveries.⁵

Children born at low birthweights face greater risks of long-term illness, long-term disability and death than infants born at normal birthweights.⁶ Children born at very low birthweight (less than 1,500 grams or 3 pounds, 4 ounces) are nearly 100 times more likely to die within the first year of life than infants of normal birthweight. Those who survive are at significantly higher risk of severe problems, including physical and visual difficulties, developmental delays, and cognitive impairments.⁷ The number of births with moderately low birthweight (1,500 to 2,400 grams or 3 pounds, 5 ounces to 5 pounds, 8 ounces) has risen 19% since 1990.⁸ Low birthweight babies are at greater risk for long-term cognitive problems, poor school performance, and are substantially less likely to complete high school than their peers.⁹

Low Birthweight Infants		
	1990	2006
RI	6.2%	8.0%
US	7.0%	8.3%
National Rank*		20th
New England Rank**		5th

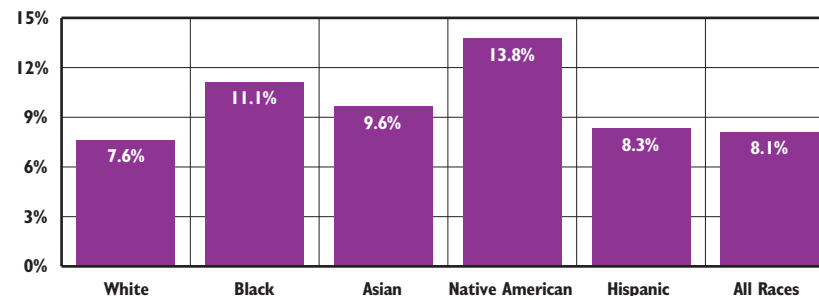
*1st is best; 50th is worst

**1st is best; 6th is worst

Source: Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Menacker, F., Kirmeyer, S. & Mathews, T.J. (2009). Births: Final data for 2006. *National vital statistics reports*, 57(7).



Low Birthweight Infants by Race/Ethnicity, Rhode Island, 2003-2007



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2003-2007. Data for 2007 are provisional. Hispanic infants can be of any race.

- ◆ 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.^{10,11} 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.¹²
- ◆ 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.^{13,14} 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.¹⁵
- ◆ Rhode Island has the 5th highest rate of twin births in the U.S. Of the 5,148 babies born with low birthweight between 2003 and 2007 in Rhode Island, 1,355 (26%) were part of a twin, triplet or higher order birth.¹⁶
- ◆ In Rhode Island between 2003 and 2007, 2% (1,035) of all infants born were very low birthweight (less than 1,500 grams).¹⁷

Low Birthweight Infants

Table 18.

Low Birthweight Infants, Rhode Island, 2003-2007

CITY/TOWN	# BIRTHS	# LOW BIRTHWEIGHT	% LOW BIRTHWEIGHT
Barrington	725	34	4.7%
Bristol	967	60	6.2%
Burrillville	776	46	5.9%
Central Falls	2,027	132	6.5%
Charlestown	387	22	NA
Coventry	1,775	152	8.6%
Cranston	4,407	350	7.9%
Cumberland	1,826	118	6.5%
East Greenwich	522	47	9.0%
East Providence	2,638	249	9.4%
Exeter	281	26	NA
Foster	228	23	NA
Glocester	410	31	NA
Hopkinton	467	38	NA
Jamestown	206	11	NA
Johnston	1,395	102	7.3%
Lincoln	935	67	7.2%
Little Compton	143	12	NA
Middletown	1,005	56	5.6%
Narragansett	547	47	8.6%
New Shoreham	52	4	NA
Newport	1,540	114	7.4%
North Kingstown	1,319	84	6.4%
North Providence	1,650	133	8.1%
North Smithfield	470	33	NA
Pawtucket	5,715	502	8.8%
Portsmouth	855	56	6.5%
Providence	14,869	1,407	9.5%
Richmond	483	38	NA
Scituate	446	23	NA
Smithfield	746	48	6.4%
South Kingstown	1,214	66	5.4%
Tiverton	660	48	7.3%
Warren	546	35	6.4%
Warwick	4,273	341	8.0%
West Greenwich	256	13	NA
West Warwick	2,019	151	7.5%
Westerly	1,322	102	7.7%
Woonsocket	3,301	326	9.9%
Unknown	2	1	NA
Core Cities	29,471	2,632	8.9%
Remainder of State	33,932	2,515	7.4%
Rhode Island	63,405	5,148	8.1%

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2003-2007. Data for 2007 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 between 2003 and 2007.

References

- ¹ 2008 KIDS COUNT data book: State profiles of child well-being. (2008). Baltimore, MD: The Annie E. Casey Foundation.
- ² U.S. Department of Health and Human Services (2005). *Child health USA 2005 data book*. Rockville, MD: U.S. Department of Health and Human Services, Maternal and Child Health Bureau.
- ^{3,4,5,8,11,14} Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Menacker, F., Kirmeyer, S. & Munson, M. L. (2009). Births: Final data for 2006. *National vital statistics reports*, 57(7). Hyattsville, MD: Centers for Disease Control and Prevention.
- ^{5,7} U.S. Department of Health and Human Services. (2008). *Child health USA 2007 data book*. Rockville, MD: U.S. Department of Health and Human Services, Maternal and Child Health Bureau.
- ⁶ Federal Interagency Forum on Child and Family Statistics. (2007). *American's children: Key national indicators of well-being 2007*. Washington, DC: Government Printing Office.
- ⁹ Shore, R. (2005). *KIDS COUNT indicator brief: Preventing low birth weight*. Baltimore, MD: The Annie E. Casey Foundation.
- ^{10,12,13,15,16,17} Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2003-2007. Data for 2007 are provisional.