

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 born with low birthweight may be born prematurely and/or 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

Children born with low birthweight have greater risk of long-term illness, long-term disability and death than infants of normal birthweight.^{5,6} They are 24 times more likely than babies of normal weight to die within the first year of life.⁷ Children born with low birthweight are more likely than their peers to have poor school performance and special education needs.^{8,9,10}

At almost all educational levels, socioeconomic levels, and age categories, Black mothers are at greater risk for having a low birthweight infant.¹¹ These disparities are not entirely explained by differences in income or health behaviors.¹² Research shows that expanding access to family support programs and health care, including primary health care and mental health services, for pregnant women and for all women of childbearing age, is effective in preventing low birthweight.¹³

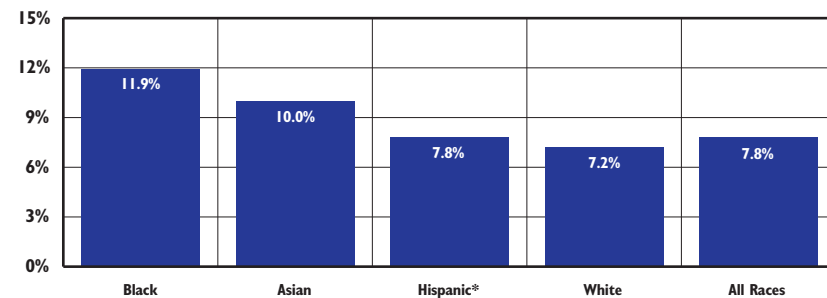
Low Birthweight Infants		
	1990	2003
RI	6.2%	8.5%
US	7.0%	7.9%
National Rank*		33rd
New England Rank**		6th

*1st is best; 50th is worst

**1st is best; 6th is worst

Source: The right start for America's newborns. (2006). Baltimore, MD: The Annie E. Casey Foundation.

Low Birthweight Infants by Race/Ethnicity, Rhode Island, 2000-2004



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1995-2004. Data for 2003-2004 are provisional. *Hispanic may be included in any racial group.

- ◆ Over the past decade, the percentage of low birthweight infants has increased for Rhode Island as a whole. The increase in low birthweight has occurred among all racial and ethnic groups.¹⁴ In Rhode Island between 2000 and 2004, the percentage of low birthweight among Black infants (11.9%) was nearly double the percentage among White infants (7.2%) and was higher than all other racial/ethnic groups.¹⁵
- ◆ Nationally and in Rhode Island, the rate of infants born low birthweight is higher for women under the age of 20. In Rhode Island the percentage of low birthweight infants born to mothers under the age of 20 was 10% compared to 8% for mothers age 20 and above.^{16,17,18}
- ◆ 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 singleton births.¹⁹ From 2000 through 2004, in Rhode Island, 6% of singletons were born low birthweight, compared to 52% of twin births and 97% of triplets.²⁰

Table 16. Low Birthweight Infants, Rhode Island, 2000-2004

CITY/TOWN	# BIRTHS	# LOW BIRTHWEIGHT	% LOW BIRTHWEIGHT
Barrington	819	33	4.0%
Bristol	1,040	62	6.0%
Burrillville	836	68	8.1%
Central Falls	1,945	138	7.1%
Charlestown	449	27	NA
Coventry	1,962	165	8.4%
Cranston	4,355	321	7.4%
Cumberland	1,825	150	8.2%
East Greenwich	569	36	6.3%
East Providence	2,564	196	7.6%
Exeter	317	15	NA
Foster	212	23	NA
Glocester	415	22	NA
Hopkinton	456	36	NA
Jamestown	218	10	NA
Johnston	1,471	123	8.4%
Lincoln	983	70	7.1%
Little Compton	179	21	NA
Middletown	1,065	64	6.0%
Narragansett	593	36	6.1%
New Shoreham	50	2	NA
Newport	1,582	102	6.4%
North Kingstown	1,464	89	6.1%
North Providence	1,664	121	7.3%
North Smithfield	511	35	6.8%
Pawtucket	5,449	479	8.8%
Portsmouth	891	59	6.6%
Providence	14,687	1,341	9.1%
Richmond	506	33	6.5%
Scituate	467	31	NA
Smithfield	760	48	6.3%
South Kingstown	1,267	73	5.8%
Tiverton	704	44	6.3%
Warren	569	54	9.5%
Warwick	4,410	366	8.3%
West Greenwich	288	12	NA
West Warwick	2,043	154	7.5%
Westerly	1,333	89	6.7%
Woonsocket	3,144	271	8.6%
Unknown	18	5	NA
Core Cities	28,850	2,485	8.6%
Remainder of State	35,212	2,534	7.2%
Rhode Island	64,080	5,024	7.8%

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2000-2004. Data for 2003-2004 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 2000-2004.

References

- ^{1,7,8} *KIDS COUNT data book: State profiles of child well-being 2005*. (2005). Baltimore, MD: The Annie E. Casey Foundation.
- ^{2,10} Hack, M. et al. (2002). Outcomes in young adulthood for very-low-birth-weight infants. *The New England Journal of Medicine*, 346, 3, 149-198.
- ^{3,5,11,19,20} Federal Interagency Forum on Child and Family Statistics. (2005). *America's children: Key national indicators of well-being 2005*. Washington, DC: Government Printing Office.
- ^{4,6} U.S. Department of Health and Human Services, Maternal and Child Health Bureau. (2004). *Child health USA 2004*. Rockville, MD: U.S. Department of Health and Human Services.
- ⁹ Fewell, R. & Deutscher, B. (Winter 2002). Contributions of receptive vocabulary and maternal style: Variables to later verbal ability and reading in low-birthweight children. *Topics in Early Childhood Special Education*. Retrieved January 29, 2004 from www.findarticles.com/cf_dls/m0HDG/4_22/1029099999/print.jhtml
- ^{12,13} Shore, R. (2005). *KIDS COUNT indicator brief: Preventing low birth weight*. Baltimore, MD: The Annie E. Casey Foundation.
- ¹⁵ Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1991-2004. Data for 2003-2004 are provisional.
- ^{14,18} Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2000-2004. Data for 2003-2004 are provisional.
- ¹⁶ March of Dimes. (n.d.) *Low birthweight by maternal age: Rhode Island, 2000-2002 Average*. Retrieved December 13, 2005 from <http://www.marchofdimes.com>
- ¹⁷ QuickStats: Rate of Very Low Birthweight, by Age of Mother and Multiple-Birth Status - United States, 2003. *Morbidity and Mortality Weekly Report*, December 2005, 54, MM47;1215. Retrieved: December 13, 2005 from <http://www.cdc.gov/mmwr>