

Infant Mortality

DEFINITION

Infant mortality is the number of deaths of 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 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.²

The two chief causes of infant death are low birthweight (particularly births at less than 750 grams) and prematurity.³ Other leading causes of infant death include congenital abnormalities and malformations, Sudden Infant Death Syndrome (SIDS), and unintentional injuries.⁴

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. Despite this decline, the

United States ranks below many other industrialized nations.^{5,6} The poor ranking of the U.S. is due in large part to disparities among various racial and ethnic groups, particularly African Americans. The infant mortality rate among African Americans is twice the national average.⁷

Risk factors for infant mortality include poor preconception health status of the mother, delayed or no prenatal care, smoking during pregnancy, pregnancies involving more than one fetus, maternal age over 40 or under 20 at the time of birth, having low education levels, and being unmarried.⁸

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.⁹

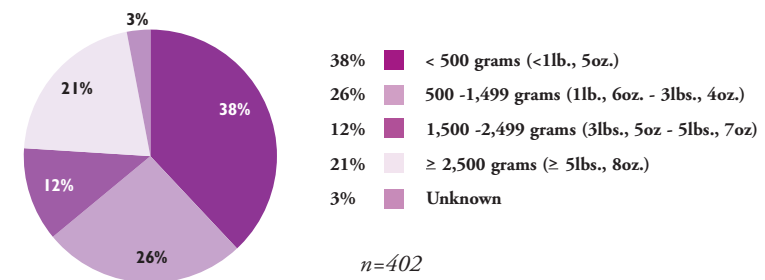
Infant Mortality Rate (rate per 1,000 live births)		
	2000	2005
RI	6.3	6.5
US	6.9	6.9
National Rank*	19 th	
New England Rank**	4 rd	

*1st is best; 50th is worst

**1st is best; 6th is worst

Source: 2008 *KIDS COUNT* data book: *State profiles in child well-being 2008*. (2008). Baltimore, MD: The Annie E. Casey Foundation.

Infant Mortality by Birthweight, Rhode Island, 2003-2007



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2003-2007. Data for 2006-2007 are provisional.

- ◆ Between 2003 and 2007, 402 infants died before their first birthday. Of these, 76% of infants who died were born at low birthweights, 21% were born at normal weights and 3% had unknown birthweights.¹⁰
- ◆ Of the 402 infant deaths between 2003 and 2007 in Rhode Island, 308 (77%) occurred in the neonatal period (during the first 27 days of life).¹¹ Neonatal mortality is generally related to short gestation and low birthweight (less than 2,500 grams), malformations at birth and/or conditions occurring in the perinatal period.¹²
- ◆ Twenty-three percent (94) of the 402 infant deaths in Rhode Island occurred in the post-neonatal period (between 28 days and one year after delivery).¹³ Nationally, most of the progress in reducing the rate of infant mortality has resulted from improving outcomes during the post-neonatal period.¹⁴
- ◆ 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.¹⁵
- ◆ 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).¹⁶

Table 19.

Infant Deaths, Rhode Island, 2003-2007

CITY/TOWN	# OF BIRTHS	# OF INFANT DEATHS	RATE PER 1,000 BIRTHS
Barrington	725	2	2.8
Bristol	967	5	5.2
Burrillville	776	1	1.3
Central Falls	2,027	17	8.4
Charlestown	387	0	NA
Coventry	1,775	8	4.5
Cranston	4,407	24	5.4
Cumberland	1,826	4	2.2
East Greenwich	522	4	7.7
East Providence	2,638	16	6.1
Exeter	281	3	NA
Foster	228	1	NA
Glocester	410	2	NA
Hopkinton	467	1	NA
Jamestown	206	1	NA
Johnston	1,395	6	4.3
Lincoln	935	6	6.4
Little Compton	143	0	NA
Middletown	1,005	2	2.0
Narragansett	547	4	7.3
New Shoreham	52	0	NA
Newport	1,540	9	5.8
North Kingstown	1,319	14	10.6
North Providence	1,650	6	3.6
North Smithfield	470	4	NA
Pawtucket	5,715	42	7.3
Portsmouth	855	5	5.8
Providence	14,869	133	8.9
Richmond	483	4	NA
Scituate	446	1	NA
Smithfield	746	3	4.0
South Kingstown	1,214	6	4.9
Tiverton	660	2	3.0
Warren	546	0	0.0
Warwick	4,273	22	5.1
West Greenwich	256	1	NA
West Warwick	2,019	11	5.4
Westerly	1,322	11	8.3
Woonsocket	3,301	21	6.4
Unknown	2	0	NA
Core Cities	29,471	233	7.9
Remainder of State	33,932	169	5.0
Rhode Island	63,405	402	6.3

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2003-2007. Data for 2006-2007 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 2003-2007.

References

- ¹ Federal Interagency Forum on Child and Family Statistics. (2007). *America's children: Key national indicators of well-being 2007*. Washington, DC: Government Printing Office.
- ² *KIDS COUNT data book: State profiles in child well-being 2004*. (2004). Baltimore, MD: The Annie E. Casey Foundation.
- ^{3,14} Shore, R. (2005). *KIDS COUNT indicator brief: Reducing infant mortality*. Baltimore, MD: The Annie E. Casey Foundation.
- ^{4,5,12} Maternal and Child Health Bureau. (2006). *Child health USA 2006 data book*. Rockville, Maryland: U.S. Department of Health and Human Services.
- ⁶ Maternal and Child Health Bureau. (2008). *Child Health USA 2007 data book*. Rockville, Maryland: U.S. Department of Health and Human Services.
- ⁷ *Infant mortality/SIDS data and statistics*. (2008). Retrieved January 5, 2009 from The Office of Minority Health, U.S. Department of Health and Human Services at www.omhrc.gov.
- ⁸ Matthews, T, MacDorman, M. (2007). Infant mortality statistics from the 2000-4 period linked birth/infant death data set. *National vital statistics reports*, 55(14). Hyattsville, MD: Centers for Disease Control and Prevention.
- ^{9,10,11,13,15,16} Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 2003-2007. Data for 2006-2007 are provisional.