

Infant Mortality

DEFINITION

Infant mortality is the number of deaths occurring to 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 women's health status, quality and access to medical care, socioeconomic conditions, and public health practices.¹ Communities with multiple problems such as poverty, unemployment and illiteracy tend to have higher infant mortality rates than more advantaged communities.²

Risk factors for infant mortality include lack of prenatal care and preventive care, poverty, short intervals between pregnancies, smoking, alcohol and substance abuse, births to teens, unmarried mothers and mothers with less than 12 years of education.^{3,4}

In the United States in 2000, one in five infant deaths was caused by a birth defect. Other leading causes of infant mortality include preterm delivery, low birthweight, sudden infant death syndrome (SIDS) and respiratory distress syndrome.⁵

During the past decade, the proportion of infant deaths in Rhode Island attributed to maternal health increased from 50% to 63%.⁶ Maternal health includes preconceptional health, perinatal care and health behaviors.

Infant mortality has two components: neonatal mortality or deaths of infants younger than 28 days and postneonatal mortality or deaths between 28 days and one year old.⁷ From 1999 to 2003, 413 infants died before their first birthday in Rhode Island. Of these, 313 (76%) were neonatal deaths and 100 (24%) were postneonatal deaths.⁸ The overall infant mortality rate for Rhode Island for 1999-2003 was 6.5 deaths per 1,000 births.⁹

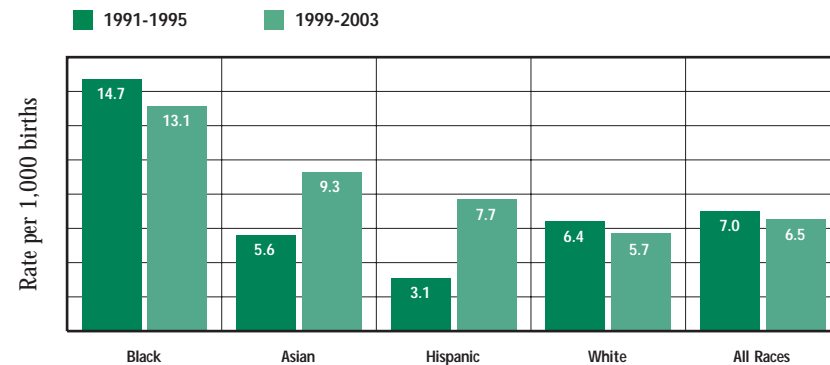
Infant Mortality Rate (rate per 1,000 live births)		
	1996	2001
RI	5.2	6.8
US	7.3	6.8
National Rank*		23rd
New England Rank**		6th

*1st is best; 50th is worst

**1st is best; 6th is worst

Source: *KIDS COUNT data book: State profiles in child well-being 2004*. (2004). Baltimore, MD: The Annie E. Casey Foundation.

Infant Mortality Rates by Race/Ethnicity, Rhode Island, 1991-1995 and 1999-2003



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1991-2003. Data for 2002-2003 are provisional.

◆ Over the past decade, Rhode Island's infant mortality rate declined for White and Black infants, but increased for Asian and Hispanic infants. However, the Black infant mortality rate, 13.1 deaths per 1,000 births, is more than twice the rate for White infants (5.7) and higher than that of any other racial or ethnic group.¹⁰

◆ At almost all educational levels, socioeconomic levels and age categories, Black mothers are at greater risk for having a pre-term delivery and a low birthweight infant.¹¹

◆ The overall decrease in Rhode Island's infant mortality rate over the past decade is partly attributed to increases in health care coverage and improved access to health care created by the expansion of public health insurance, including RIte Care and Medicaid.¹²

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Table 17. Number of Infant Deaths, Rhode Island, 1999-2003

CITY/TOWN	# BIRTHS	# INFANT DEATHS	RATE/1000 BIRTHS
Barrington	839	1	1.2
Bristol	1,034	7	6.8
Burrillville	803	1	1.2
Central Falls	1,862	12	6.4
Charlestown	459	2	NA
Coventry	2,003	10	5.0
Cranston	4,305	19	4.4
Cumberland	1,763	13	7.4
East Greenwich	569	2	3.5
East Providence	2,478	14	5.6
Exeter	343	0	NA
Foster	196	5	NA
Glocester	429	5	NA
Hopkinton	453	3	NA
Jamestown	206	1	NA
Johnston	1,470	9	6.1
Lincoln	988	11	11.1
Little Compton	170	2	NA
Middletown	1,075	3	2.8
Narragansett	631	5	7.9
New Shoreham	54	0	NA
Newport	1,576	8	5.1
North Kingstown	1,503	7	4.7
North Providence	1,614	9	5.6
North Smithfield	521	1	1.9
Pawtucket	5,219	42	8.0
Portsmouth	869	5	5.8
Providence	14,306	135	9.4
Richmond	500	0	0.0
Scituate	472	1	NA
Smithfield	769	2	2.6
South Kingstown	1,293	2	1.5
Tiverton	655	3	4.6
Warren	559	4	7.2
Warwick	4,416	19	4.3
West Greenwich	305	1	NA
West Warwick	2,035	15	7.4
Westerly	1,308	10	7.6
Woonsocket	3,092	24	7.8
Unknown	15	0	NA
Core Cities	28,090	236	8.4
Remainder of State	35,052	177	5.1
Rhode Island	63,157	413	6.5

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1999- 2003. Data for 2002-2003 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 1999-2003.

References for Indicator

- ¹ Federal Interagency Forum on Child and Family Statistics. (2003). *America's children: Key national indicators of well-being 2003*. Washington, DC: U.S. Government Printing Office.
- ² *KIDS COUNT data book: State profiles in child well-being 2004*. (2004). Baltimore, MD: The Annie E. Casey Foundation.
- ³ U.S. Department of Health and Human Services. (2002). *HHS fact sheet: Preventing infant mortality*. Washington, DC: U.S. Department of Health and Human Services.
- ⁴ Matthews, T., Menacker, F., MacDorman, M. (2003). Infant mortality statistics from the 2001 period linked birth/infant death data set. *National vital statistics reports*, 52(2).
- ⁵ *Perinatal profiles: statistics for monitoring maternal and infant health*. (2003). Washington, DC: March of Dimes.
- ⁶ Viner-Brown, S. Kini, H. & Hollinshead, W. (2003). Infant mortality in Rhode Island: A time trend analysis. *Medicine & health Rhode Island*, 86(1), 24-26.
- ⁷ Maternal and Child Health Bureau. (2002). *Child health USA 2002*. Rockville, MD: U.S. Department of Health and Human Services.
- ^{8,10} Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1991-2003. Data for 2002-2003 are provisional.
- ¹¹ Shore, R. (2002). *KIDS COUNT indicator brief: Preventing low birthweight*. Baltimore, MD: The Annie E. Casey Foundation.
- ¹² Center for Child and Family Health. (2002). *RI Medicaid research and evaluation reports. issue brief #3: Rhode Island's infant mortality rate drops significantly in 1990s*. Cranston, RI: Rhode Island Department of Human Services.