

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

During the past two decades in the United States, 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.³ Nationally, about a third of infant deaths occur after the first month of life.⁴

Infant mortality has two components: neonatal mortality, deaths of infants younger than 28 days, and postneonatal mortality, deaths between 28 days and one year old.⁵ From 1997

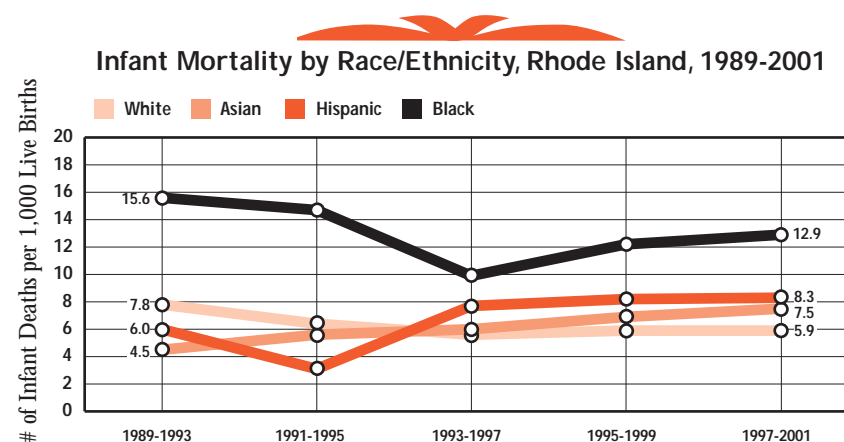
to 2001, 409 Rhode Island infants died before their first birthday. Of these, 318 (78%) were neonatal deaths and 91 (22%) were postneonatal deaths.⁶ Risk factors for infant mortality include lack of prenatal care and preventive care, poverty, poor living conditions, short intervals between pregnancies, inadequate maternal nutrition, smoking, alcohol and substance use, and mothers with less than 12 years of education.^{7,8}

During the past decade, the proportion of infant deaths in Rhode Island attributed to maternal health increased from 50% to 63%.⁹ Maternal health includes preconceptional health, perinatal care, and health behaviors. Factors contributing to this increase include an increase in the number of very low birthweight infants, an overall increase in premature births, and an increase in multiple gestation births.¹⁰ The growth in multiple births has also contributed to the increase in premature and low birthweight births.¹¹

Infant Mortality Rate (rate per 1,000 live births)		
	1990	1999
RI	8.1	5.7
US	9.2	7.1
State Rank	6th	

1st is best; 50th is worst

Source: *KIDS COUNT Data Book: State Profiles of Child Well-Being 2002* (2002). Baltimore, MD: The Annie E. Casey Foundation.



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1989-1993, 1991-1995, 1993-1997, 1995-1999 and 1997-2001. Data for 1999-2001 are provisional.

◆ Over the past decade, Rhode Island's infant mortality rate has declined for White and Black infants, but has increased for Hispanic and Asian infants. Infant mortality rates for all racial and ethnic groups except White infants have been gradually rising since 1995. The Black infant mortality rate for 1997-2001 is more than twice the rate for White infants and higher than that of any other racial and ethnic group.¹²

◆ During the 1990s, the infant mortality rate dropped 36% for infants with publicly-funded health insurance coverage and 17% for infants with private health insurance coverage. The gap in infant mortality rates between these two groups of infants was reduced by more than half.¹³

Table 16. Number of Infant Deaths, Rhode Island, 1997-2001

CITY/TOWN	# BIRTHS	# INFANT DEATHS	RATE/1000 BIRTHS
Barrington	820	2	2.4
Bristol	1,067	5	4.7
Burrillville	781	4	5.1
Central Falls	1,781	17	9.5
Charlestown	446	1	NA
Coventry	1,924	5	2.6
Cranston	4,171	20	4.8
Cumberland	1,701	15	8.8
East Greenwich	588	3	5.1
East Providence	2,499	13	5.2
Exeter	341	1	NA
Foster	197	3	NA
Glocester	464	2	NA
Hopkinton	488	5	NA
Jamestown	205	0	NA
Johnston	1,492	10	6.7
Lincoln	990	8	8.1
Little Compton	157	1	NA
Middletown	1,083	6	5.5
Narragansett	667	2	3.0
New Shoreham	57	1	NA
Newport	1,645	8	4.9
North Kingstown	1,500	2	1.3
North Providence	1,576	16	10.2
North Smithfield	515	1	1.9
Pawtucket	5,030	44	8.7
Portsmouth	917	5	5.5
Providence	13,589	134	9.9
Richmond	473	0	NA
Scituate	506	2	4.0
Smithfield	805	2	2.5
South Kingstown	1,298	6	4.6
Tiverton	649	1	1.5
Warren	582	4	6.9
Warwick	4,428	29	6.5
West Greenwich	297	1	NA
West Warwick	2,024	10	4.9
Westerly	1,375	7	5.1
Woonsocket	2,980	13	4.4
Unknown	2	0	NA
Core Cities	27,049	226	8.4
Remainder of State	35,061	183	5.2
Rhode Island	62,110	409	6.6

Source of Data for Table/Methodology

Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 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 1997-2001.

References for Indicator

^{1,4} *America's Children: Key National Indicators of Well-Being 2002* (2002). Washington, DC: Federal Interagency Forum on Child and Family Statistics.

² *KIDS COUNT DATA BOOK: State Profiles in Child Well-Being 2002* (2002). Baltimore, MD: The Annie E. Casey Foundation.

³ *Perinatal Profiles: Statistics for Monitoring Maternal and Infant Health* (2003). Washington, DC: March of Dimes.

⁵ *Child Health USA 2002* (2002). Rockville, MD: Department of Health and Human Services, Maternal and Child Health Bureau.

^{6,12} Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1997-2001. Data for 1999-2001 are provisional.

⁷ *HHS Fact Sheet: Preventing Infant Mortality* (2001). Washington, DC: US Department of Health and Human Services.

⁸ Matthews, T., et al (2002). "Infant Mortality Statistics from the 1999 Period Linked Birth/Infant Death Data Set" in *National Vital Statistics Reports*, Vol.50, No.4.

^{9,10,11} Viner-Brown, S., et al (January 2003). "Infant Mortality in Rhode Island: A Time Trend Analysis" in *Medicine & Health / Rhode Island*, Vol. 86, No. 1.

¹³ *RI Medicaid Research and Evaluation Reports, Issue Brief #3: Rhode Island's Infant Mortality Rate Drops Significantly in 1990s* (2002). Cranston, RI: Rhode Island Department of Human Services, Center for Child and Family Health.