

Preterm Births

DEFINITION

Preterm births is the percentage of births occurring before the 37th week of pregnancy. The data are reported by place of mother's residence, not place of infant's birth.

SIGNIFICANCE

Preterm birth is a major determinant of infant mortality and morbidity and is the leading cause of death among newborns during the first month of life in the U.S.^{1,2} Infants born before 37 weeks gestation are at higher risk than infants born full-term for neurodevelopmental, respiratory, gastrointestinal, immune system, central nervous system, hearing and vision problems.^{3,4} Infants born preterm have longer hospital stays than full-term infants. Nationally, newborns with no complications stay an average of 1.5 days in the hospital, compared with an average of 13 days for preterm infants.⁵ Preschool and school-age children who are born preterm can also experience learning difficulties, and more behavioral problems later in life.⁶ Infants born very preterm (<32 weeks gestation) are at highest risk for death and life-long disability.⁷

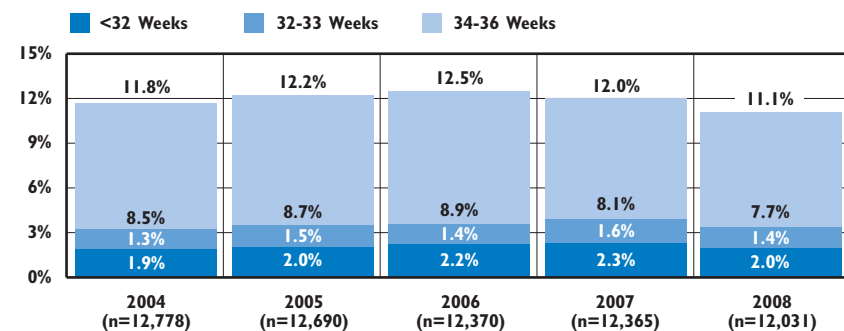
While the specific causes of spontaneous preterm births are largely unknown, research indicates that there are a number of inter-related risk factors involved. The three leading risk factors

are a history of preterm birth, current multifetal pregnancy, and uterine and/or cervical abnormalities. Other risk factors include infections, diabetes, hypertension, late or no prenatal care, and maternal use of tobacco, alcohol and other drugs.⁸ The rate of preterm births for Rhode Island women who smoke is higher than for those who do not. Between 2004 and 2008, 14.7% of births to smokers were preterm, compared with 11.4% of preterm births to women who did not smoke during pregnancy.⁹

Nationally in 2007, the preterm birth rate was 12.7%. The preterm birth rate has generally been on the rise for more than two decades. While preterm birth occurs in all racial and ethnic groups, nationally the rate is highest for non-Hispanic blacks.¹⁰ Low-income women also are at greater risk for pre-term births than higher-income women.¹¹

Multiple birth infants are more likely to be born preterm than singletons. In Rhode Island between 2004 and 2008, 57.1% of multiple births were preterm, compared with 10.1% of singleton births.¹² Multifetal pregnancy is a known risk factor for preterm birth.¹³ Nationally, widespread use of fertility drugs, which cause a high percentage of multiple births, likely play a role in premature births.¹⁴

Preterm Births by Gestational Age, Rhode Island, 2004-2008



Source: Rhode Island Department of Health, Center for Health Data and Analysis, 2004-2008. Percentages by gestational age may not sum to total percentage of preterm births due to rounding.

- ◆ Between 2004 and 2008, the preterm birth rate in Rhode Island was 11.9%.¹⁵ The majority of preterm births in Rhode Island during this period were late preterm births (34-36 weeks gestation). Approximately 2% of births in Rhode Island in 2008 were very preterm (<32 weeks gestation).¹⁶
- ◆ In Rhode Island between 2004 and 2008, more than one in six (17.3%) Native American births was preterm, compared with 14.8% of Black, 13.3% of Asian and 11.4% of White births. During this time period, 13.4% of births to Hispanic women were preterm (Hispanic women can be of any race).¹⁷
- ◆ Women under age 20 have higher preterm birth rates than women over age 20. The rate of preterm births among women under age 20 between 2004 and 2008 was 13.4%. The preterm birth rate was 24.7% for mothers under age 14, 15.8% for 15 to 17 year olds and 12.0% for 18 to 19 year olds.¹⁸
- ◆ Among women with private health insurance coverage in Rhode Island between 2004 and 2008, 11.0% of all births were premature, compared with 12.8% of those with public insurance (RIte Care or Medicaid) and 22.0% of those with no health insurance.¹⁹

Table 19.

Preterm Births, Rhode Island, 2004-2008

City/Town	# Births	# Preterm Births	% Preterm Births
Barrington	667	67	10.0%
Bristol	921	76	8.3%
Burrillville	754	84	11.1%
Central Falls	2,021	243	12.0%
Charlestown	370	34	NA
Coventry	1,683	209	12.4%
Cranston	4,325	507	11.7%
Cumberland	1,784	192	10.8%
East Greenwich	517	44	8.5%
East Providence	2,606	309	11.9%
Exeter	261	32	NA
Foster	233	17	NA
Glocester	398	48	NA
Hopkinton	458	52	NA
Jamestown	187	16	NA
Johnston	1,390	150	10.8%
Lincoln	909	105	11.6%
Little Compton	141	15	NA
Middletown	984	89	9.0%
Narragansett	492	54	11.0%
Newport	1,516	181	11.9%
New Shoreham	49	6	NA
North Kingstown	1,272	120	9.4%
North Providence	1,615	195	12.1%
North Smithfield	439	51	NA
Pawtucket	5,668	683	12.1%
Portsmouth	810	69	8.5%
Providence	14,774	2,046	13.8%
Richmond	460	49	NA
Scituate	417	48	NA
Smithfield	730	68	9.3%
South Kingstown	1,161	117	10.1%
Tiverton	625	58	9.3%
Warren	527	62	11.8%
Warwick	4,193	476	11.4%
West Greenwich	245	25	NA
West Warwick	1,989	217	10.9%
Westerly	1,340	146	10.9%
Woonsocket	3,304	455	13.8%
Unknown	5	3	NA
Core Cities	29,272	3,825	13.1%
Remainder Of State	32,963	3,590	10.9%
Rhode Island	62,240	7,418	11.9%

Source of Data for Table/Methodology

Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2004-2008. Data for 2008 are provisional.

Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

NA: Percentages were not calculated for cities and towns with fewer than 500 births, because percentages with small denominators are statistically unreliable.

Preterm births are defined as live births that occurred before the 37th week of pregnancy.

The denominator is the total number of live births to Rhode Island residents between 2004 and 2008.

References

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