

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 in the U.S. Infants born before 37 weeks gestation are at higher risk than full-term infants for neurodevelopmental, respiratory, gastrointestinal, immune system, central nervous system, hearing, dental, and vision problems. Children who were born preterm may experience physical disabilities, learning difficulties, and behavioral problems later in life.^{1,2,3}

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 health conditions, weight, maternal depression, late or no prenatal care, stress, domestic violence, and maternal use of tobacco, alcohol, and other drugs.^{4,5}

Even "late preterm" infants (34-36 weeks gestation) can experience immediate and long-term complications. Infants born very preterm (<32 weeks

gestation) are at highest risk for death and enduring health problems, high hospitalization costs during their first year, and increased health care-related costs later in life.^{6,7} Preventive interventions can improve outcomes for very preterm infants and their caregivers.^{8,9}

The U.S. preterm birth rate rose slightly between 2014 and 2015, from 9.57% to 9.63%. This is the first rise since steady declines between 2007 and 2014. The preterm birth rate also increased among Non-Hispanic Black infants and Hispanic infants between 2014 and 2015, while it remained stable for non-Hispanic White infants. Non-Hispanic Black women continue to have the highest preterm birth rate in the U.S. (13.4% in 2015).^{10,11}

Preterm birth is a major contributor to infant mortality in the U.S., particularly among non-Hispanic Black, Cuban, American/Alaska Native, and Puerto Rican infants.¹²

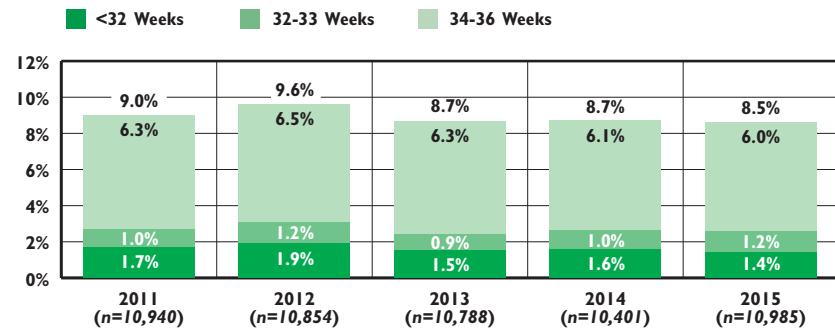
Preterm Births		
	2007	2015
RI	10.8%	8.6%
US	10.4%	9.6%
National Rank*		13th
New England Rank**		5th

*1st is best; 50th is worst

**1st is best; 6th is worst

Sources: For 2015: Martin, J. A., et al. (2017). Births: Final data for 2015. *NVSR*, 66(1), 1-69. For 2007: Martin, J. A., et al. (2015). Measuring gestational age in vital statistics data: Transitioning to the obstetric estimate. *NVSR*, 64(5), 1-19.

Preterm Births by Gestational Age*, Rhode Island, 2011-2015



Source: RI Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2011-2015. Percentages by gestational age may not sum to total percentage of preterm births due to rounding. *See note regarding new methodology for calculating preterm births, starting with the 2016 Factbook. Data for births in 2015 are provisional.

- ◆ The single-year preterm birth rate in Rhode Island decreased from 2014 to 2015 (8.7% to 8.5%). Between 2011 and 2015, 70.1% of all preterm births in Rhode Island were late preterm births (34-36 weeks gestation) and 18.0% of all preterm births were very preterm (<32 weeks gestation).¹³
- ◆ Multiple births are more likely to be born preterm. In Rhode Island between 2011 and 2015, 55.2% of multiple births were preterm, compared with 7.2% of singleton births.¹⁴
- ◆ Between 2011 and 2015, 11.1% of births of Black infants in Rhode Island were preterm, compared with 8.4% of Asian and 8.4% of White infants. During this same time period, 9.4% of births to Hispanic women in Rhode Island were preterm.¹⁵
- ◆ The rate of preterm births varies by age. In Rhode Island between 2011 and 2015, 9.4% of births among teen girls under age 20, 8.5% of births among women ages 20 to 34, and 10.5% of births among women age 35 and older were preterm.¹⁶
- ◆ Among women with private health insurance coverage in Rhode Island between 2011 and 2015, 8.3% of births were preterm, compared with 9.4% of those with public insurance coverage and 16.7% of births to women with no health insurance.¹⁷
- ◆ In Rhode Island between 2011 and 2015, 9.4% of births to women with a high school degree or less were preterm, compared with 8.1% of those with higher education levels.¹⁸

Table 19. Preterm Births, Rhode Island, 2011-2015

CITY/TOWN	# BIRTHS	# PRETERM BIRTHS	% PRETERM BIRTHS
Barrington	513	32	6.2%
Bristol	730	54	7.4%
Burrillville	648	57	8.8%
Central Falls	1,575	146	9.3%
Charlestown	249	19	NA
Coventry	1,448	110	7.6%
Cranston	3,916	378	9.7%
Cumberland	1,625	122	7.5%
East Greenwich	573	53	9.2%
East Providence	2,372	186	7.8%
Exeter	244	12	NA
Foster	172	19	NA
Glocester	344	33	NA
Hopkinton	306	25	NA
Jamestown	128	7	NA
Johnston	1,323	97	7.3%
Lincoln	952	90	9.5%
Little Compton	77	11	NA
Middletown	851	65	7.6%
Narragansett	346	22	NA
New Shoreham	53	3	NA
Newport	1,283	109	8.5%
North Kingstown	1,042	73	7.0%
North Providence	1,635	157	9.6%
North Smithfield	420	36	NA
Pawtucket	4,930	492	10.0%
Portsmouth	570	43	7.5%
Providence	12,724	1,266	9.9%
Richmond	319	29	NA
Scituate	359	35	NA
Smithfield	620	38	6.1%
South Kingstown	874	60	6.9%
Tiverton	525	48	9.1%
Warren	454	44	NA
Warwick	3,844	317	8.2%
West Greenwich	231	15	NA
West Warwick	1,754	151	8.6%
Westerly	927	60	6.5%
Woonsocket	2,908	284	9.8%
Unknown	104	7	NA
Four Core Cities	22,137	2,188	9.9%
Remainder of State	31,727	2,610	8.2%
Rhode Island	53,968	4,805	8.9%

Source of Data for Table/Methodology

Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2011-2015. Data for births in 2015 are provisional and 2014 data do not include births among Rhode Island residents that occurred out-of-state.

The denominator is the total number of live births to Rhode Island residents from 2011-2015.

*Beginning in 2015, the federal Centers for Disease Control and Prevention and the Rhode Island Department of Health transitioned to a new standard for estimating the gestational age of the newborn. The new measure – the obstetric estimate of gestation at delivery (OE) – replaces the measure based on the date of the last normal menses (LMP).

The 2011-2015 five year preterm birth percentage and the single year average are measured by OE. Because of this change, preterm birth data reported prior to the 2016 Factbook are not comparable. National preterm birth data use the OE measurement as of the 2007 data year at the time of publication of this Factbook

NA: Rates should not be calculated due to small numbers and the lack of statistical reliability.

Unknown: Births were to Rhode Island residents, but specific city/town information was unavailable.

Core cities are Central Falls, Pawtucket, Providence, and Woonsocket.

References

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- ^{2,6} *Preterm births*. (2015). Washington DC: Child Trends.
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- ^{13,14,15,16,17,18} Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2011-2015.