

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 interrelated risk factors involved. The three leading risk factors are a history of preterm birth, pregnancy with multiples, and uterine and/or cervical abnormalities. Other risk factors include some health conditions and infections, weight, delayed or no prenatal care, stress, domestic violence, having pregnancies close together, and maternal use of tobacco, alcohol, or 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, enduring health problems, high hospitalization costs during their first year, and increased health care costs later in life.^{6,7} Preventive interventions can improve outcomes for preterm infants and their caregivers.^{8,9}

The U.S. preterm birth rate rose between 2018 and 2019, from 10.02% to 10.23%. This is the fifth year of an increase after steady declines from 2007 and 2014. The preterm birth rate varies by race/ethnicity, with non-Hispanic Black women (14.4%) continuing to have the highest preterm birth rate in the U.S. in 2019. Hispanic women had a preterm birth rate of 10.0% in 2019 and non-Hispanic white women had a rate of 9.3%. The rate increased for each group between 2018 and 2019.^{10,11} Nationally, racial and ethnic disparities affect the outcomes of preterm infants, with the preterm-related infant mortality rate for Black infants about three times the rate for white infants in 2013.¹²

Preterm Births		
	2009	2019
RI	11.4%	9.6%
US	12.2%	10.2%
National Rank*		17th
New England Rank**		6th

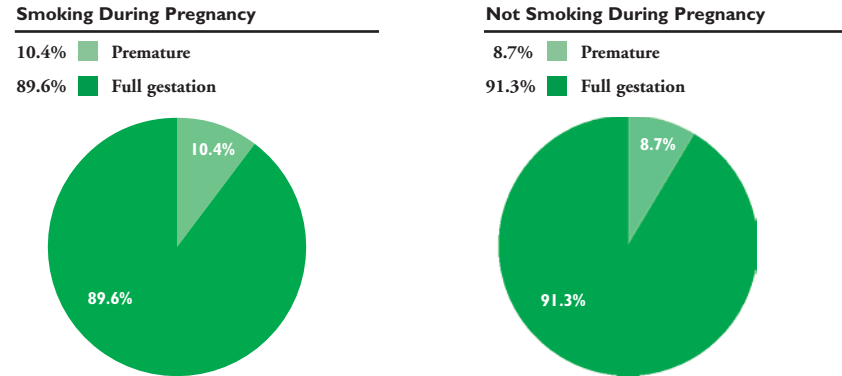
*1st is best; 50th is worst

**1st is best; 6th is worst

Sources: For 2009: Martin, J. A., et al. (2011). Measuring gestational age in vital statistics data: Transitioning to the obstetric estimate. *NVSR*, 64(5), 1-19. For 2019: Martin, J. A., et al. (2021). Births: Final data for 2019. *NVSR*, 68(13), 1-47.



Preterm Births by Smoking Status, Rhode Island, 2015-2019



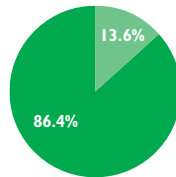
Source: Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2015-2019. *See note regarding new methodology for calculating preterm births, starting with the 2016 Factbook.

- ◆ Between 2015 and 2019, 71.4% of all preterm births in Rhode Island were late preterm births (34-36 weeks gestation), and 16.5% of all preterm births were very preterm (<32 weeks gestation).¹³
- ◆ Multiple births are more likely to be born preterm. In Rhode Island between 2015 and 2019, 58.6% of multiple births were preterm, compared with 7.0% of singleton births.¹⁴
- ◆ Between 2015 and 2019, 13.7% of births of Non-Hispanic Native American and 11.5% of births of Non-Hispanic Black infants in Rhode Island were preterm, compared with 7.7% of Non-Hispanic Asian and 8.2% of Non-Hispanic white infants. During this same time period, 9.6% of births to Hispanic women in Rhode Island were preterm.¹⁵
- ◆ In Rhode Island between 2015 and 2019, 9.7% of births to women with a high school degree or less were preterm, compared with 8.3% of those with higher education levels.¹⁶
- ◆ Social determinants of health, including poverty, racism, and access to care are important factors in the disparities in preterm births.¹⁷
- ◆ "17B," a weekly injection given to mothers with a history of preterm birth and a current singleton pregnancy, can reduce the chance of recurrent preterm birth by 33%.¹⁸

Preterm Births by Mother's Insurance Type, Rhode Island, 2015-2019

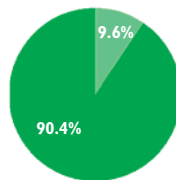
Uninsured

13.6% ■ Preterm Births
86.4% ■ Full-term Births



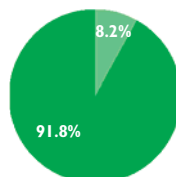
Public Insurance (Rtite Care)

9.6% ■ Preterm Births
90.4% ■ Full-term Births



Private Insurance

8.2% ■ Preterm Births
91.8% ■ Full-term Births



Source: Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2015-2019.

Table 19. Preterm Births, Rhode Island, 2015-2019

CITY/TOWN	# BIRTHS	# PRETERM BIRTHS	% PRETERM BIRTHS
Barrington	558	41	7.3%
Bristol	672	54	8.0%
Burrillville	635	57	9.0%
Central Falls	1,567	173	11.0%
Charlestown	255	30	11.8%
Coventry	1,521	100	6.6%
Cranston	3,920	354	9.0%
Cumberland	1,708	139	8.1%
East Greenwich	529	45	8.5%
East Providence	2,284	178	7.8%
Exeter	244	25	10.2%
Foster	180	15	8.3%^
Glocester	350	24	6.9%
Hopkinton	332	23	6.9%^
Jamestown	126	6	*
Johnston	1,328	120	9.0%
Lincoln	923	73	7.9%
Little Compton	79	10	12.7%^
Middletown	815	65	8.0%
Narragansett	273	26	9.5%^
New Shoreham	38	8	*
Newport	1,226	99	8.1%
North Kingstown	1,106	92	8.3%
North Providence	1,567	152	9.7%
North Smithfield	457	35	7.7%
Pawtucket	4,680	455	9.7%
Portsmouth	664	42	6.3%
Providence	12,184	1,179	9.7%
Richmond	279	26	9.3%
Scituate	432	40	9.3%
Smithfield	713	45	6.3%
South Kingstown	880	70	8.0%
Tiverton	574	55	9.6%
Warren	414	31	7.5%
Warwick	3,785	323	8.5%
West Greenwich	229	14	6.1%^
West Warwick	1,645	128	7.8%
Westerly	979	70	7.2%
Woonsocket	2,765	277	10.0%
Unknown	150	13	8.7%^
Four Core Cities	21,196	2,084	9.8%
Remainder of State	31,720	2,615	8.2%
Rhode Island	53,066	4,712	8.9%

Source of Data for Table/Methodology

Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2015-2019. Data for births in 2015 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 2015-2019.

*The data are statistically unreliable and rates are not reported and should not be calculated.

^The data are statistically unstable and rates or percentages should be interpreted with caution.

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 2015-2019 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.

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

References

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