

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}

Late preterm infants (34-36 weeks gestation) can experience immediate and long-term complications but infants born very preterm (<32 weeks gestation) are at highest risk for death, enduring health problems, more and longer hospitalizations, and increased health care costs later in life.^{4,5}

Preventive interventions and treatments can improve outcomes for preterm infants and their caregivers.⁶

The three leading risk factors of preterm birth are a history of preterm birth, pregnancy with multiples, and uterine and/or cervical abnormalities. Other risk factors include some health conditions and infections, maternal

weight, delayed or no prenatal care, stress, domestic violence, having pregnancies close together, and substance use.^{7,8}

In 2022, the U.S. preterm birth rate was 10.38%, a decrease from the year prior (10.49%). The preterm birth rate varies by race/ethnicity, with non-Hispanic Black women (14.6%) continuing to have the highest preterm birth rate in the U.S. in 2022.

American Indian and Alaska Native women (12.6%) and Native Hawaiian and Other Pacific Islander women (11.9%) had higher rates than Hispanic women (10.1%), non-Hispanic white women (9.4%), and Asian women (9.2%). The rate decreased for Black, Hispanic, and white groups from 2022, while the other groups had changes that were not significant.^{9,10} Higher rates of preterm-related causes of death account for more than half of the racial disparity in infant mortality between Black women and white women.¹¹

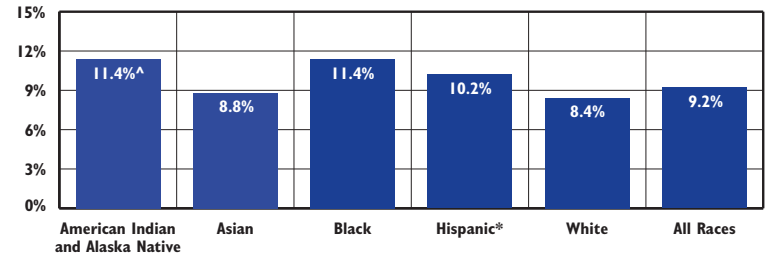
Preterm Births		
	2012	2022
RI	11.0%	9.0%
US	11.5%	10.4%
National Rank*		6th
New England Rank**		3rd

*1st is best; 50th is worst

**1st is best; 6th is worst

Source: For 2012: Martin, J. A., et al. (2014). Births: Final data for 2012. NVSR, 62(9), 1-20. For 2022: Martin, J. A., et al. (2023). Births: Provisional data for 2022. Vital Statistics Rapid Release no 28.

Preterm Birth Infants by Race/Ethnicity, Rhode Island, 2018-2022



Source: Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2018-2022. *Hispanic infants can be of any race. [^] The data are statistically unstable and should be interpreted with caution.

★ Between 2018 and 2022, 11.4% of births of non-Hispanic Native American and 11.4% of births of non-Hispanic Black infants in Rhode Island were preterm, compared with 8.8% of non-Hispanic Asian and 8.4% of non-Hispanic white infants. During this same time, 10.2% of births to Hispanic women in Rhode Island were preterm.¹²

★ Between 2018 and 2022, 73.0% of all preterm births in Rhode Island were late preterm births (34-36 weeks gestation), and 15.3% of all preterm births were very preterm (<32 weeks gestation).¹³ Multiple births are more likely to be born preterm. In Rhode Island between 2018 and 2022, 61.7% of multiple births were preterm, compared with 7.5% of singleton births.¹⁴

★ Between 2018 and 2022, 12.4% of births to women who smoked during pregnancy were preterm compared to 9.0% of those who did not smoke during pregnancy. During this period, 10.3% of births to women with a high school degree or less were preterm, compared with 8.5% of those with higher education levels.¹⁵

★ Social determinants of health, including poverty, housing, and access to reproductive care are important factors in preterm birth disparities. Racism and associated social stressors are additional risk factors that disproportionately impact Black women and Women of Color.^{16,17}

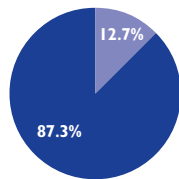
Table 18. Preterm Births, Rhode Island, 2018-2022

CITY/TOWN	# BIRTHS	# PRETERM BIRTHS	% PRETERM BIRTHS
Barrington	585	45	7.7
Bristol	673	55	8.2
Burrillville	654	56	8.6
Central Falls	1,505	178	11.8
Charlestown	280	29	10.4
Coventry	1,491	119	8.0
Cranston	3,810	353	9.3
Cumberland	1,740	147	8.4
East Greenwich	614	43	7.0
East Providence	2,229	185	8.3
Exeter	242	17	7.0 ^
Foster	208	21	10.1 ^
Glocester	359	25	7.0
Hopkinton	316	23	7.3 ^
Jamestown	131	10	*
Johnston	1,361	122	9.0
Lincoln	914	71	7.8
Little Compton	77	4	*
Middletown	763	53	6.9
Narragansett	273	22	8.1 ^
New Shoreham	31	1	*
Newport	1,048	75	7.2
North Kingstown	1,094	82	7.5
North Providence	1,605	152	9.5
North Smithfield	481	46	9.6
Pawtucket	4,332	431	9.9
Portsmouth	659	54	8.2
Providence	11,726	1,189	10.1
Richmond	348	31	8.9
Scituate	445	41	9.2
Smithfield	747	54	7.2
South Kingstown	827	74	8.9
Tiverton	550	46	8.4
Warren	405	34	8.4
Warwick	3,528	305	8.6
West Greenwich	249	21	8.4 ^
West Warwick	1,462	145	9.9
Westerly	874	75	8.6
Woonsocket	2,604	268	10.3
Unknown	235	18	*
Four Core Cities	20,167	2,066	10.2
Remainder of State	31,308	2,654	8.5
Rhode Island	51,475	4,720	9.2

Preterm Births by Mother's Insurance Status, Rhode Island, 2018-2022

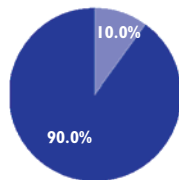
Uninsured

12.7% Preterm Births
87.3% Full-term Births



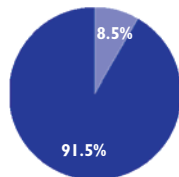
Public Insurance (Rite Care)

10.0% Preterm Births
90.0% Full-term Births



Private Insurance

8.5% Preterm Births
91.5% Full-term Births



Source: Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2018-2022.

Source of Data for Table/Methodology

Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2018-2022. The denominator is the total number of live births to Rhode Island residents from 2018-2022. Future reports with birth counts may change.

*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 data of the last normal menses (LMP).

The 2018-2022 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

- Centers for Disease Control and Prevention. (2023). *Preterm birth*. Retrieved March 14, 2024, from [cdc.gov](https://www.cdc.gov)
- Mayo Clinic. (2013). *Premature birth*. Retrieved March 14, 2024, from [mayoclinic.org](https://www.mayoclinic.org)
- Beauregard, J.L., et al. (2018). Preterm birth, poverty, and cognitive development. *Pediatrics*, 141(1): e20170509.
- Martin J.A., Osterman M.J.K. (2018). Describing the increase in preterm births in the United States, 2014–2016. *NCHS Data Brief, no 312*. Hyattsville, MD: National Center for Health Statistics.
- World Health Organization. (2023). *Preterm births*. Retrieved March 14, 2024, from [who.org](https://www.who.org)

(continued on page 181)