

# 2016 PREMATURE BIRTH REPORT CARD

Massachusetts	Preterm Birth Rate	Grade
	8.4%	<b>B</b>

The March of Dimes Prematurity Campaign aims to reduce preterm birth rates across the United States. Premature Birth Report Card grades are assigned by comparing the 2015 preterm birth rate in a state or locality to the March of Dimes goal of 8.1 percent by 2020. The Report Card also provides county and race/ethnicity data to highlight areas of increased burden and elevated risks of prematurity.

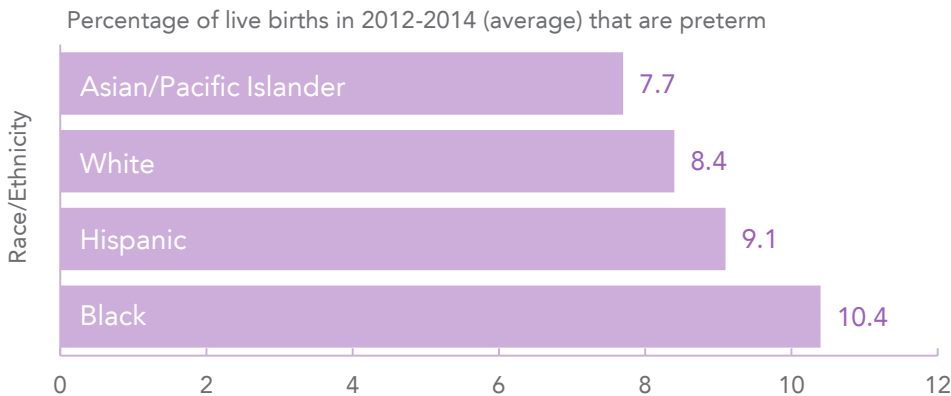
## COUNTIES

Counties with the greatest number of births are graded based on their 2014 preterm birth rates.

County	Preterm birth rate	Grade
Bristol	8.1%	A
Essex	8.8%	B
Middlesex	8.0%	A
Norfolk	9.0%	B
Suffolk	9.5%	C
Worcester	8.9%	B

## RACE & ETHNICITY IN MASSACHUSETTS

The March of Dimes uses a Disparity Index score to measure and track progress towards the elimination of racial/ethnic disparities in preterm birth. The score represents the average percent difference in the preterm birth rate across all groups compared to the group with the lowest rate in the state. Index scores range from 0 (achievement of equity) to 44 (highest score in 2016).



<b>Disparity index</b>
<b>21</b>
<b>State rank</b>
<b>#19</b>

In Massachusetts, the preterm birth rate among **black women** is **22%** higher than the rate among all other women.

For details on data sources and calculations, see Technical Notes.  
For more information on how we are working to reduce premature birth, visit [www.marchofdimes.org](http://www.marchofdimes.org).

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## TECHNICAL NOTES

### PRETERM BIRTH: DEFINITION AND SOURCE

Premature or preterm birth is birth less than 37 weeks gestation based on the obstetric estimate of gestational age. Data used in this report card come from the National Center for Health Statistics (NCHS) natality files, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. This national data source is used so that data are comparable for each state- and jurisdiction-specific premature birth report card. Therefore, data provided on the report card may differ from data obtained directly from state or local health departments and vital statistics agencies, due to timing of data submission and handling of missing data. The preterm birth rate used to assign the grade shown at the top of the report card is from the NCHS 2015 final natality data. The county preterm birth rates and grades are calculated from the NCHS 2014 final natality data, while the preterm birth rates by race/ethnicity are calculated from the NCHS 2012-2014 final natality data. Preterm birth rates are calculated as the number of preterm births divided by the number of live births with known gestational age multiplied by 100.

### GRADING METHODOLOGY

Grade ranges were established in 2015 based on standard deviations of final 2014 state and District of Columbia preterm birth rates away from the March of Dimes goal of 8.1% by 2020. Grades were determined using the following scoring formula: (preterm birth rate of each jurisdiction – 8.1%) / standard deviation of final 2014 state and District of Columbia preterm birth rates. The resulting scores were rounded to one decimal place and assigned a grade. See the table for details.

### PRETERM BIRTH BY COUNTY

Report cards for states and jurisdictions, except District of Columbia, display up to 6 counties with the greatest number of live births. Counties are not displayed if the number of preterm births is less than 20. Counties are ordered alphabetically. Grades are assigned based on criteria described above.

Grade	Preterm birth rate range Scoring criteria
A	Preterm birth rate less than or equal to 8.1% Score less than or equal to 0.0
B	Preterm birth rate of 8.2% to 9.2% Score greater than 0.0, but less than or equal to 1.0
C	Preterm birth rate of 9.3% to 10.3% Score greater than 1.0, but less than or equal to 2.0
D	Preterm birth rate of 10.4% to 11.4% Score greater than 2.0, but less than or equal to 3.0
F	Preterm birth rate greater than or equal to 11.5% Score greater than 3.0

### PRETERM BIRTH BY RACE/ETHNICITY OF THE MOTHER

Race and Hispanic ethnicity are reported separately on the birth certificate. Rates for Hispanic women include all racial categories (white, black, American Indian/Alaska Native, Asian/Pacific Islander). Rates for non-Hispanic women are classified according to race. The Asian/Pacific Islander category includes Native Hawaiian. In order to provide stable rates, three years of data were aggregated (2012-2014) and a numerator of 20 in each year (2012, 2013, 2014) was required for a category to appear on the report card. Preterm birth rates for not stated/unknown race are not shown on the report card.

### PRETERM BIRTH DISPARITY INDEX AND RANK

The March of Dimes index of racial/ethnic disparity ("disparity index") in preterm birth provides a measure of the differences, or disparities, in preterm birth rates across racial/ethnic groups within a geographic area. The index was developed by the March of Dimes Perinatal Data Center and is calculated for each U.S. state with adequate numbers, the District of Columbia and the total United States.

To calculate the disparity index, the lowest preterm birth rate among the displayed racial/ethnic groups is identified for a geographic area and used as the comparison rate. The percent difference between the preterm birth rate and the comparison rate is calculated for each of the remaining racial/ethnic groups. The percent differences are then averaged to produce the index number, displayed as an integer. The disparity index number can be 0 or greater, with 0 representing no difference between groups. The unrounded index number for each geographic area is ranked against all other geographic areas, with the rank of #1 indicating the least disparity.

The report card also provides the percent difference between the racial/ethnic group with the highest preterm birth rate compared to the combined preterm birth rate among women in all other racial/ethnic groups in the state or jurisdiction. This percent difference is calculated using only the racial/ethnic groups displayed on the state- or jurisdiction-specific report card. This difference is calculated for each U.S. state with adequate numbers and the District of Columbia.

### CALCULATIONS

All calculations were conducted by the March of Dimes Perinatal Data Center.