

A Profile of Prematurity in Puerto Rico



In an average week in Puerto Rico

543

babies are born

62

babies are born preterm

46

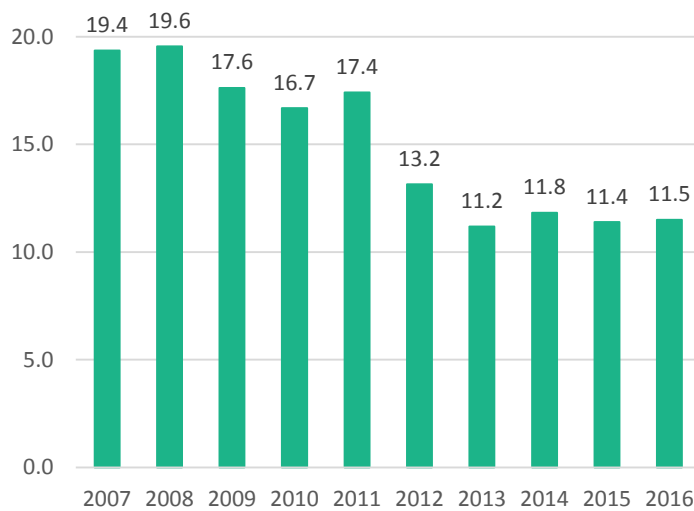
babies are born late preterm

8

babies are born very preterm

Preterm birth in Puerto Rico

Puerto Rico, 2007-2016



- In 2016, there were 3,248 preterm births in Puerto Rico, representing 11.5% of live births.
- In 2016, 1 in 9 babies was born preterm in Puerto Rico.

Municipality Rates, 2013-2016

Municipalities	Preterm birth rate
Bayamón	11.7
Caguas	11.0
Carolina	10.2
Ponce	12.2
San Juan	10.2

The March of Dimes aims to reduce preterm birth rates across the United States to 8.1 percent of live births by 2020. Every baby in Puerto Rico deserves the chance to be born healthy.

- Among the municipalities with the greatest number of births from 2013-2016, no municipality had met the March of Dimes preterm birth rate goal of 8.1%.
- Ponce had the highest preterm birth rate in 2013-2016 (12.2%), compared to Carolina and San Juan, which had the lowest preterm birth rate (10.2%).

Risk factors for preterm birth

Rather than having one cause, preterm birth seems to be triggered by multiple, interacting biologic and environmental factors. We know that a history of preterm birth, multiple gestations, and certain uterine and/or cervical problems are the strongest risk factors for preterm birth. The factors below also contribute to preterm birth.

Maternal age

During 2014-2016 (average) in Puerto Rico, preterm birth rates were highest for women ages 40 and older (16.3%), followed by women ages 30-39 (12.5%) and under age 20 (12.0%), and ages 20-29 (10.9%).

Smoking

In 2016, 8.4% of women of childbearing age reported smoking in Puerto Rico. Smoking is an important determinant of health and a significant factor contributing to preterm births.

Multiple birth

In Puerto Rico in 2016, 10.3% of singleton births were preterm, compared to 67.5% of multiple births. Multiple births represent 2.0% of live births in Puerto Rico. Current multifetal pregnancy is one of most consistently identified risk factors for preterm birth.

Birth spacing

Birth spacing, or inter-pregnancy interval, is the timing between a live birth and the beginning of the next pregnancy. Birth spacing of less than 18 months increases the risk of preterm birth and other adverse outcomes. In the United States, 33.1% of pregnancies with a prior live birth have a birth spacing of less than 18 months.

Obesity

While obesity does not directly cause preterm birth, it does increase rates of medical complications (e.g., hypertension, diabetes) that contribute to preterm birth. In Puerto Rico, 27.3% of women of childbearing age were obese in 2016.

Health insurance coverage

In 2016, 6.9% of women of childbearing age was uninsured in Puerto Rico. Health care before, during and after pregnancy can help identify and manage conditions that contribute to preterm birth.

Other contributing factors

Other factors contributing to preterm birth include: infection (especially genito-urinary), diabetes mellitus, hypertension, late or no prenatal care, alcohol and illicit drug use, and social determinants of health. Socioeconomic status at both the individual and community level (e.g., income/poverty, job status, education) as well as psychosocial factors (e.g., chronic stress, lack of social support) are associated with an increased risk of preterm birth.

Consequences of preterm birth

Prematurity is the leading cause of newborn death and disability among infants, including developmental delays, chronic respiratory problems, and vision and hearing impairment. In addition to the health consequences of preterm birth, the emotional and economic impact of preterm birth on families is too high.

36.3%

Infant deaths are preterm-related

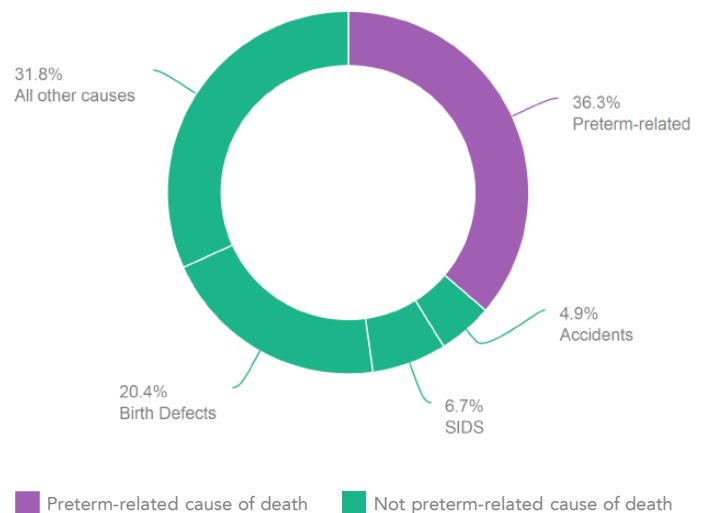
When causes of death related to preterm birth are grouped together, preterm-related causes account for more than one third (36.3%) of infant deaths in the United States. (See figure.)

\$26.2B

Associated with preterm birth

The annual societal economic cost (medical, educational, and lost productivity) associated with preterm birth in the United States is at least \$26.2 billion.

Preterm-related and other leading causes of infant deaths United States, 2013



March of Dimes National Prematurity Campaign

The Mission of the March of Dimes is to improve the health of babies by preventing birth defects, preterm birth, and infant mortality. Prematurity is the leading cause of newborn death and a major determinant of illness and disability among infants. The March of Dimes leads the national Prematurity Campaign, with the goal of achieving equity and demonstrated improvements in preterm birth. For more information, visit www.marchofdimes.org/prematurity

Footnotes

1. Preterm is less than 37 weeks of pregnancy.
2. Late preterm is between 34 and 36 weeks gestation.
3. Very preterm is less than 32 weeks.
4. Multiple deliveries include twin, triplet and higher order deliveries.
5. Smoking is defined as having ever smoked 100 cigarettes in a lifetime and currently smoking everyday or some days. Percent reported is among women ages 18-44.
6. Obesity is defined as a Body Mass Index of 30 or more.
7. Birth spacing is the period of time between giving birth and getting pregnant again. Its also called pregnancy spacing or interpregnancy interval (also called IPI).
8. Social determinants of health are the conditions in which people are born, grow, work, live and age, as well as the wider set of forces and systems that shape daily life conditions.
9. Women of childbearing age are defined as 18-44 years.
10. A woman was considered uninsured if she was not covered by any type of health insurance at the time of the survey.
11. Preterm-related cause of death is a grouping of causes of death each determined to be a direct consequence of preterm birth (44 codes from the tenth International Classification of Diseases (ICD-10)).

Sources

- National Center for Health Statistics, final natality data.
- Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.
- Prematurity risk factors compiled by March of Dimes available at marchofdimes.org/pregnancy/preterm-laborand-birth.aspx.
- IPUMS-USA, University of Minnesota, www.ipums.org. American Community Survey, US Census Bureau.
- Blumenshine P, Egerter S, Barclay CJ, et al. Socioeconomic disparities in adverse birth outcomes: a systematic review. *Am J Prev Med* 2010;39(3):263-72.
- National Center for Health Statistics, period linked birth/infant death data.
- Long-term health effects of preterm birth compiled by March of Dimes available at marchofdimes.org/complications/long-term-health-effects-of-premature-birth.aspx
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