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### Introduction

The March of Dimes Prematurity Campaign was launched in January 2003 to address this serious, leading obstetrical problem that significantly impacts all racial and ethnic populations in the U.S. The rate of preterm birth (less than 37 completed weeks gestation) has risen steadily in the U.S., reaching 12.5% in 2004—which represents an increase of more than 30% between 1981 and 2004.<sup>1</sup> This means that in 2004, 1 in 8 U.S. babies was born preterm. The chance of being born too early was much greater for some racial/ethnic groups. More than 1 in 6 non-Hispanic black infants were born preterm.

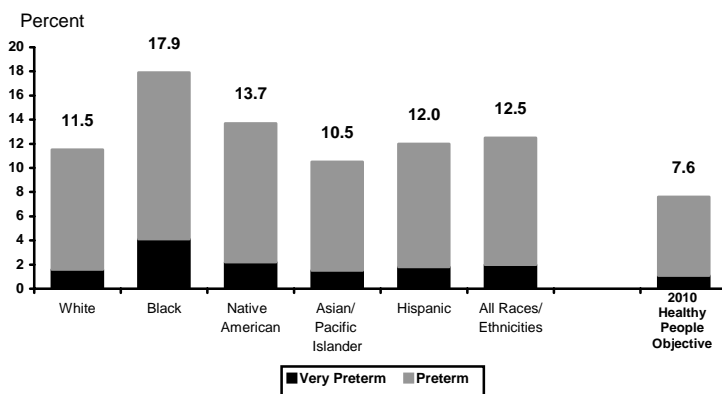
Since 1999, prematurity/low birthweight has been the leading cause of neonatal mortality in the U.S., surpassing birth defects.<sup>2</sup> In addition, the rate of infant deaths due to prematurity/low birthweight has continued to increase. While birth defects remain the leading cause of infant mortality in the U.S., prematurity/low birthweight is now the leading cause of infant mortality in some states.<sup>2</sup> Prematurity/low birthweight has been the leading cause of death for non-Hispanic black infants for more than a decade.

Prematurity is a common, complex disorder and for approximately half of these early births the cause remains unknown. One perplexing factor is the profound and persistent racial and ethnic disparities. One of the two Healthy People 2010 goals is to eliminate health disparities.<sup>3</sup> Among the objectives is to address the racial and ethnic disparities in all aspects of perinatal health, including prematurity.

The March of Dimes supports the Healthy People objective to reduce the rate of preterm births to 7.6% by 2010.

### Current Data

Figure 1: Preterm and Very Preterm Birth Rates by Maternal Race/Ethnicity, U.S., 2004



All race categories exclude Hispanic births  
Source: National Center for Health Statistics, 2004 final natality data  
Prepared by the March of Dimes Perinatal Data Center, 2007

The preterm birth rate varies by race/ethnicity.

- In 2004, the highest rate of preterm birth was reported for blacks at 17.9%. However, even the lowest rate for Asian or Pacific Islanders (10.5%) was still 38% above the Healthy People 2010 objective of 7.6%.<sup>3,4</sup>
- The 2004 very preterm birth rates (less than 32 weeks gestation) follow a similar trend, with the highest rate reported for blacks (4.1%), followed by Native Americans (2.2%), Hispanics (1.8%) and whites (1.6%). The lowest rate for Asian or Pacific Islanders (1.5%) was still 36% above the Healthy People 2010 objective of 1.1%.<sup>3,4</sup>
- There are also significant differences in preterm birth rates among subpopulations within the same racial and ethnic group. For example, within the Hispanic population, preterm birth rates ranged from 11.7% among Central and South American infants to 14.0% among Puerto Rican infants in 2004.<sup>1</sup>

Table 1: Preterm Birth by Race/Ethnicity, U.S., 1994 & 2004

Race/ Ethnicity	Preterm Birth				% change in rate
	1994		2004		
	Number	Percent	Number	Percent	
White	224,754	9.3	262,643	11.5	23.7
Black	111,692	18.2	102,967	17.9	-1.6
Native American	4,172	12.0	5,379	13.7	14.2
Asian or Pacific Islander	14,984	10.1	22,468	10.5	4.0
Hispanic	71,495	10.9	110,938	12.0	10.1
All infants	431,613	11.0	508,356	12.5	13.6

All race categories exclude Hispanic births

Source: National Center for Health Statistics, 1994 & 2004 final natality data

Prepared by March of Dimes Perinatal Data Center, 2007

The changes in preterm birth rates over time also differ among racial/ethnic groups. Table 1 (above) compares the numbers and rates of preterm birth for 1994 and 2004:

- The black preterm birth rate decreased 1.6% between 1994 and 2004, while the white rate has increased 23.7%.
- The preterm birth rate for Native Americans increased over 14.2%, and the rate for Hispanics increased 10.1%, while rates for Asian or Pacific Islanders increased 4.0%.

Over the past decade, the decrease in the rates of preterm births among blacks and the increase in the rates among whites have reduced the disparity in preterm births by race. However, this trend was disrupted in recent years when the rates for non-Hispanic blacks increased from 17.4% in

2000 to 17.9% in 2004.<sup>1</sup> The factors contributing to these changes in the preterm birth rates among blacks have not been clearly identified and highlight a need for further investigation and research to identify and understand the causes.

The increase in the prematurity rates for white women is thought to be driven by increases in births to women of advanced maternal age, infertility management and multiple births.<sup>1,5</sup> Each of these are independent risk factors, but there is also overlap. For example, women of advanced maternal age may be more likely to receive infertility treatment, but maternal age alone increases the potential for obstetric and medical complications and spontaneous multiple birth, thus increasing the risk of preterm birth.

Racial and ethnic disparities in preterm birth rates remain a pressing public health problem. While it is imperative that special attention be given to addressing the disparities, it is also important to note that preterm birth is a problem that impacts all racial and ethnic groups in the U.S. It is clear that to achieve the public health objectives set by Healthy People 2010, efforts must be focused on eliminating racial/ethnic disparities and reducing preterm birth rates for all racial and ethnic groups in the U.S., with resources targeting those groups that are disproportionately affected.

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## Understanding Disparities

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There is ongoing research to study and understand the factors that contribute to disparities in perinatal outcomes. Some areas that have been considered are: infections and inflammation (e.g., urogenital<sup>6</sup>), effects of stress/racism,<sup>7,8</sup> socioeconomic status,<sup>9,10</sup> and genetic predispositions.<sup>11</sup> Research in these areas and on gene-environment interactions may provide further insights into underlying mechanisms of the disparities.<sup>12,13</sup> Although none of these factors can fully explain the racial/ethnic disparities, multidisciplinary approaches that examine the relationship of social and biologic factors may contribute to the goal of explaining the differences in preterm birth rates and ultimately lead to promising interventions.<sup>14</sup>

In a paper published in 2005,<sup>15</sup> the March of Dimes Scientific Advisory Committee on Prematurity included racial/ethnic disparities as one of the six high-priority areas for prematurity research. Addressing both the underlying biology of gestational length and inequalities in health care delivery systems is important for the development of responsive, culturally-sensitive interventions that could reduce and eventually eliminate those inequities.<sup>15</sup> From 1998-2004, the March of Dimes Perinatal Epidemiological Research Initiative (PERI) supported prematurity-related research using an epidemiological approach. Another program called the Prematurity Research Initiative (PRI) began in 2005 to fund research to learn more about the causes of preterm birth.

The March of Dimes is committed to achieving the goal of Healthy People 2010 to eliminate health disparities, particularly in the area of perinatal health. Examples of current activities at both the chapter and national levels include:

- Creating and updating consumer information for print materials and online (nacersano.org) in Spanish

- Availability of perinatal data by race/ethnicity, geographic region and maternal age through PeriStats ([www.marchofdimes.com/peristats](http://www.marchofdimes.com/peristats))
- Chapter collaborations with national organizations and/or health care professionals at the local level to implement community-based programs for populations at risk for disparities in birth outcomes such as: Zeta Phi Beta Sororities/Stork's Nest<sup>®</sup>, Alpha Phi Alpha Fraternity/Project Alpha<sup>®</sup>, and Comenzando bien<sup>®</sup>
- Advocating for increased access to health care coverage for uninsured women of childbearing age, infants and children at the state and federal level

Through such activities and collaborations with our Campaign partners and alliances, it is hoped that progress will be made to decrease and eventually achieve equity in preterm birth and other adverse perinatal outcomes.

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