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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 an all time high of 12.1% in 2002—which represents an increase of more than 27% between 1982 and 2002.¹ This means that in 2002, about 1 in 8 U.S. babies was born preterm. The chance of being born too early was much greater for some racial/ethnic groups, as demonstrated by the statistic that more than 1 in 6 non-Hispanic black infants were born preterm.

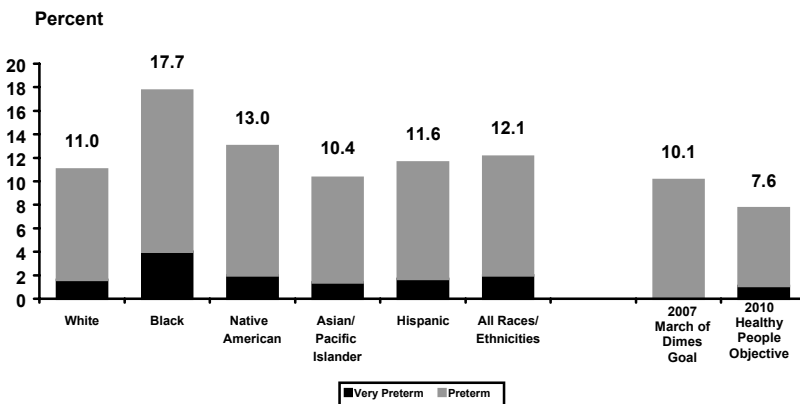
Since 1999, prematurity/low birthweight has been the leading cause of neonatal mortality in the U.S., surpassing birth defects.² In addition, the rate of infant deaths due to prematurity/low birthweight has continued to increase. While birth defects remain the leading cause of infant mortality in the U.S., prematurity/low birthweight is now the leading cause of infant mortality in many states.² Prematurity/low birthweight has been the leading cause of death for 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. Other perplexing factors are the profound and persistent racial and ethnic disparities. One of the two Healthy People 2010 goals is to eliminate health disparities.³ Among the objectives is to address the racial and ethnic disparities in all aspects of perinatal health, including prematurity.

- The Healthy People objective is to reduce the rate of preterm births to 7.6 by 2010.
- The March of Dimes Prematurity Campaign has set a mid-course goal to reduce the preterm birth rate to no more than 10.1 by 2007.

Current Data

Figure 1: Preterm and Very Preterm Birth Rates by Maternal Race/Ethnicity, U.S., 2002



All race categories exclude Hispanic births

Source: National Center for Health Statistics, 2002 final natality data

Prepared by the March of Dimes Perinatal Data Center, 2004

The preterm birth rate varies by race/ethnicity.

- In 2002, the highest rate of preterm birth was reported for blacks at 17.7%. However, even the lowest rate for Asian or Pacific Islanders (10.4%) was still 27% above the Healthy People (HP) 2010 objective of 7.6%.^{3,4}
- The 2002 very preterm birth rates (less than 32 weeks gestation) follow a similar trend, with the highest rate reported for blacks (4.0%), followed by Native Americans (2.0%), Hispanics (1.7%) and whites (1.6%). The lowest rate for Asian or Pacific Islanders (1.4%) was still 21% above the HP 2010 objective of 1.1%.^{3,4}
- 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 10.5% among Cuban infants to 14.0% among Puerto Rican infants.¹

Table 1: Preterm Birth by Race/Ethnicity, U.S., 1990 & 2002

Race/Ethnicity	Preterm Birth				% change in rate
	1990*		2002		
	Number	Rate	Number	Rate	
White	221,691	8.5	251,132	11.0	29
Black	123,768	18.9	101,423	17.7	-6
Native American	3,933	12.0	4,953	13.0	8
Asian or Pacific Islander	13,242	10.1	20,904	10.4	3
Hispanic	63,973	11.0	99,510	11.6	5
All infants	436,590	10.6	480,812	12.1	14

* States not reporting ethnicity in 1990 were excluded.

All race categories exclude Hispanic births

Source: National Center for Health Statistics, final natality data

Prepared by March of Dimes Perinatal Data Center, 2004

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 1990 and 2002:

- The black preterm birth rate decreased more than 6% between 1990 and 2002, while the white rate has increased nearly 30%.
- The preterm birth rate for Native Americans and Hispanics increased more than 5%, while rates for Asian or Pacific Islanders increased 3%.

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 when the rates for non-Hispanic blacks increased from 17.4% in 2000 to 17.7% in 2002.¹ The factors contributing to these changes in the preterm birth rates among blacks have not been clearly identified and highlights a need for further investigation and research to identify and understand the causes.

The increase in the prematurity rates for white women is hypothesized to be driven by increases in births to women of advanced maternal age, infertility management and multiple births.^{1,5} 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 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 and the March of Dimes, 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.

Understanding Disparities

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,⁶ periodontal disease⁷), effects of stress/racism^{8,9} and socioeconomic status,^{10,11} clotting abnormalities,^{12,13} nutritional factors,¹⁴ and genetic predispositions.¹⁵ Research in these areas and on gene-environment interactions appear to be providing invaluable insights into underlying mechanisms that may shed new light on these discussions.^{16,17} Although none of these factors can fully explain the racial/ethnic disparities, multidisciplinary approaches that examine the relationship of social and biologic factors may enhance progress to explain the differences in preterm birth rates and ultimately lead to promising interventions.

In 1998, the March of Dimes launched the Perinatal Epidemiological Research Initiative (PERI) to support prematurity-related research using an epidemiological approach. These six grants have been investigating social and biological factors associated with prematurity through data collection and analysis. For examples of prematurity-related research, please see the Medical Perspective: *Snapshots of Prematurity Research*.

To accomplish the mission of the March of Dimes and achieve the goals of the Prematurity Campaign, the foundation exerts special effort toward addressing the needs of populations at high risk of delivering before 37 completed weeks of pregnancy. A variety of current activities at the chapter and national levels demonstrate efforts to address the issue of disparities in preterm birth rates. Reducing unusually high preterm birth rates in specific populations is consistent with all five prematurity campaign aims.

The Campaign aims are to:

1. Raise public awareness of the problems of prematurity.
2. Educate pregnant women and their families to recognize the signs of preterm labor. Support families of babies in neonatal intensive care units (NICU).
3. Assist health care practitioners to improve prematurity risk detection and address risk-associated factors.
4. Invest more public and private research dollars to identify causes of preterm labor and prematurity, and to identify and test promising interventions.
5. Expand access to health coverage in order to improve maternity care and infant health outcomes.

Through activities to target these aims in collaboration 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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