

Preventing Preventable Preterm Birth:  
Putting A Community Prematurity Campaign in Place

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# Prematurity Campaign Background

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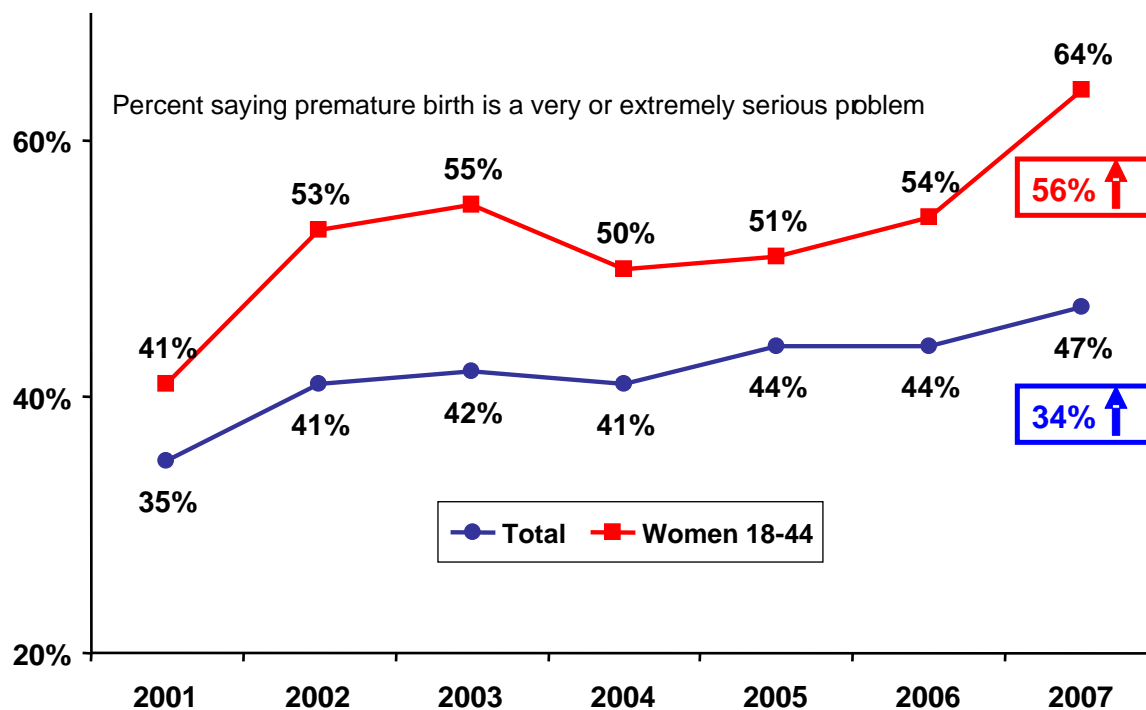
Initiated in January 2003

Two goals:

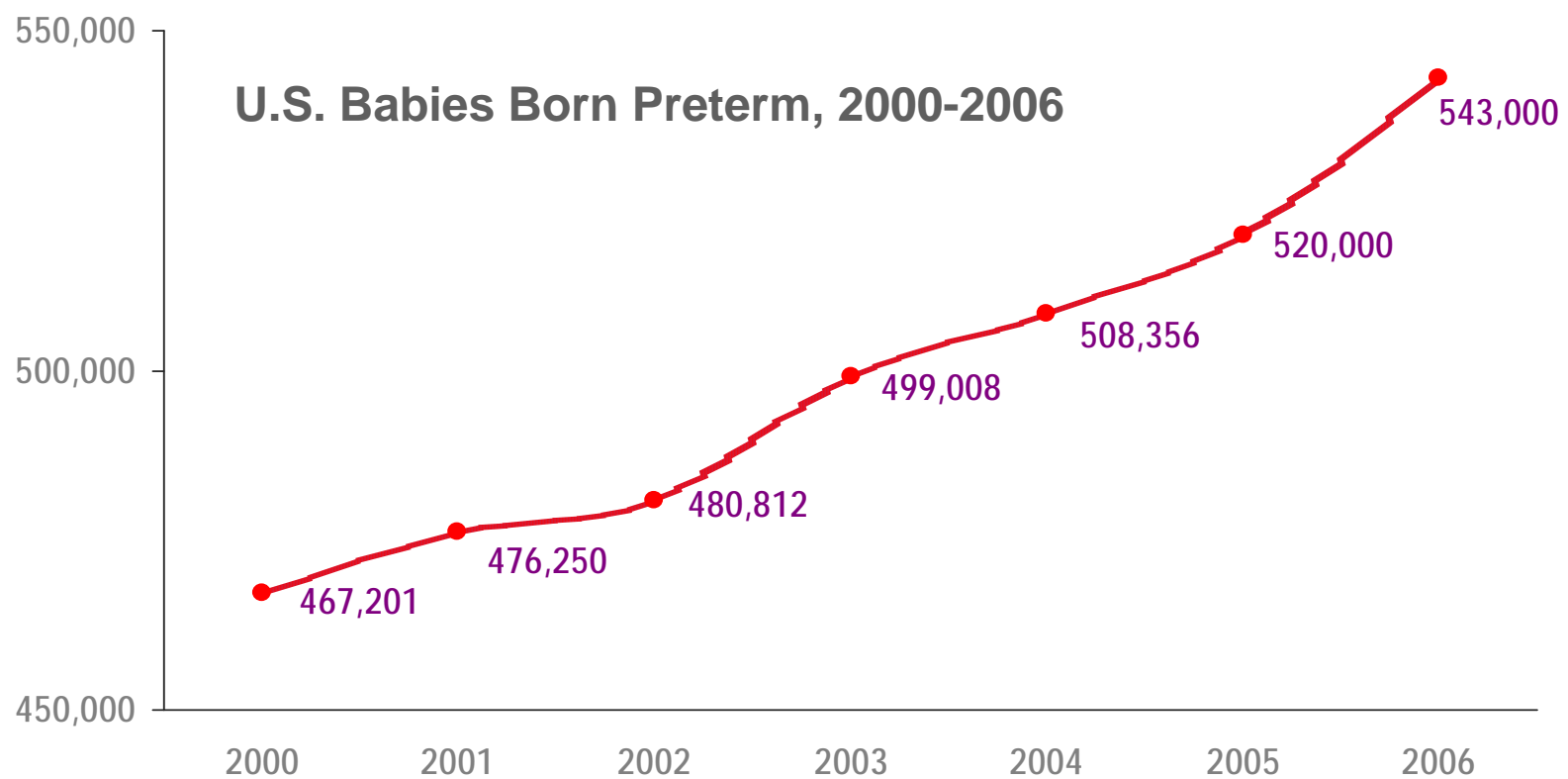
1. Increase public awareness of the problems of prematurity to at least 60% for women of child bearing age, and 50% for the general public by 2010
2. Decrease the rate of preterm birth by at least 15% by 2010.

# Prematurity Campaign: Prematurity Awareness

## Campaign Goal I: Raise awareness of the problems of prematurity



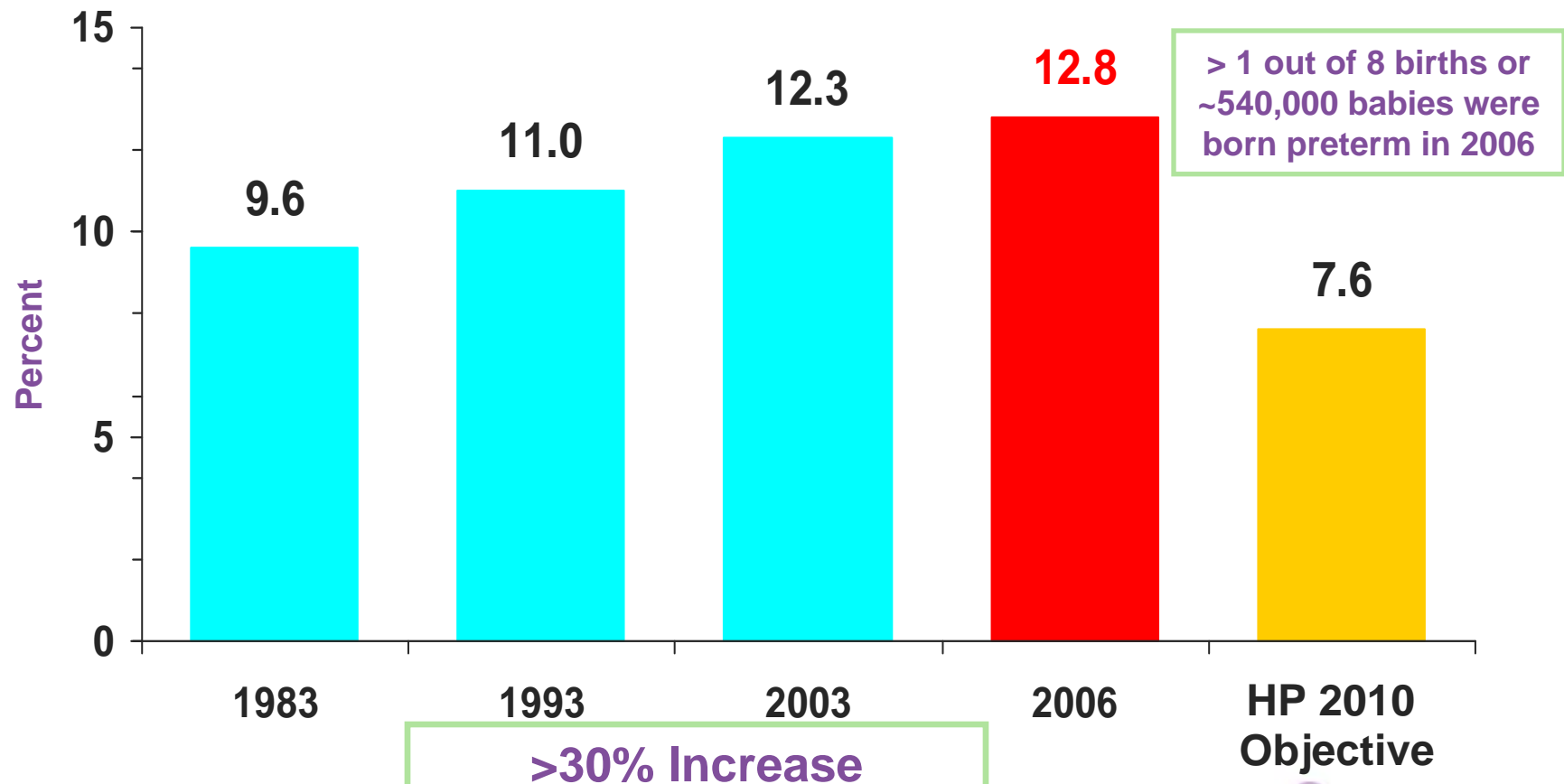
# Prematurity Campaign: Prematurity Rates



\*2006 preliminary birth data provided by the National Center for Health Statistics; Source: National Center for Health Statistics



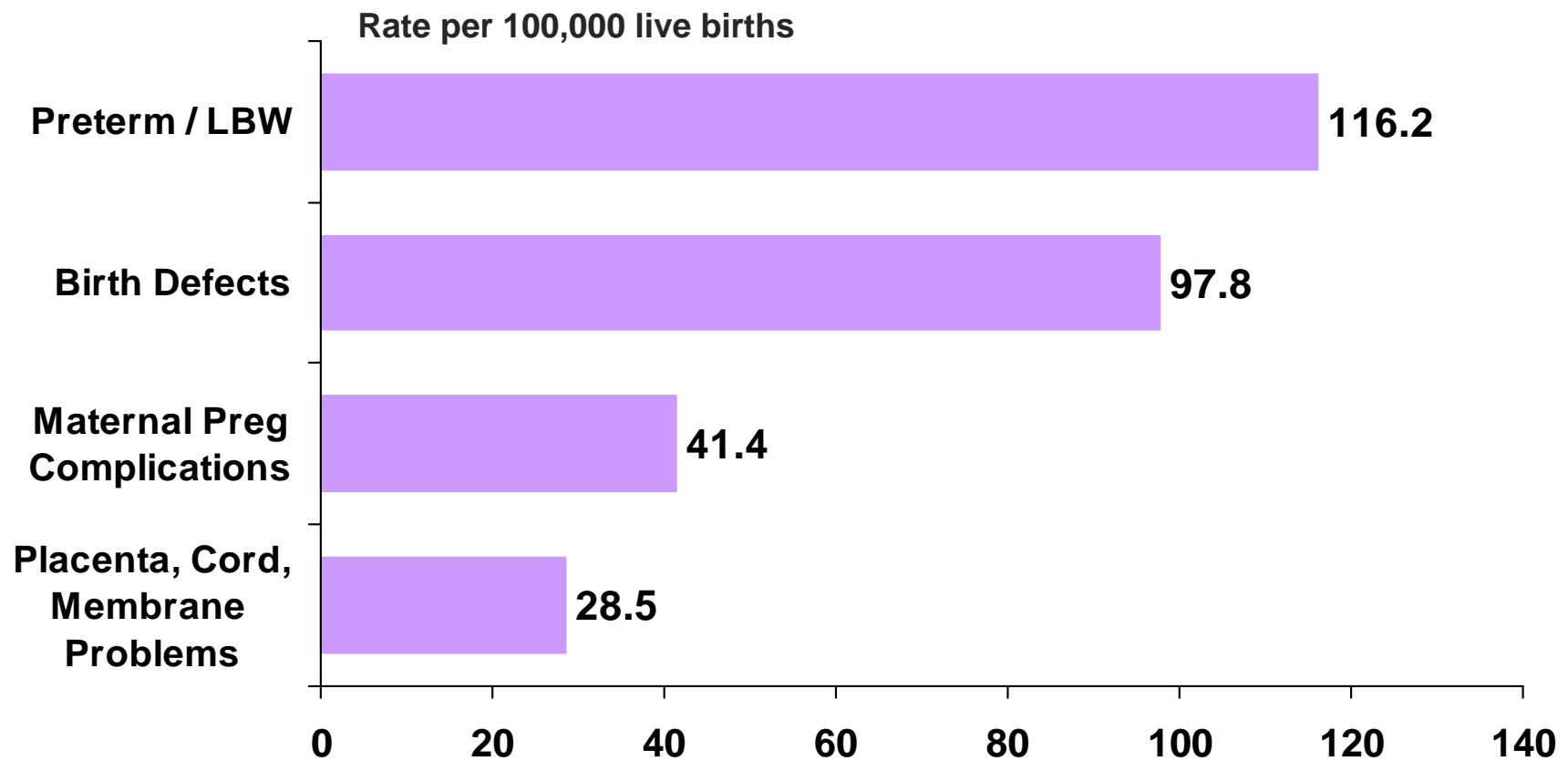
# Preterm Birth Rates United States, 1983, 1993, 2003, 2006



Preterm is less than 37 completed weeks gestation.  
Source: National Center for Health Statistics, final natality data  
Prepared by March of Dimes Perinatal Data Center, 2008

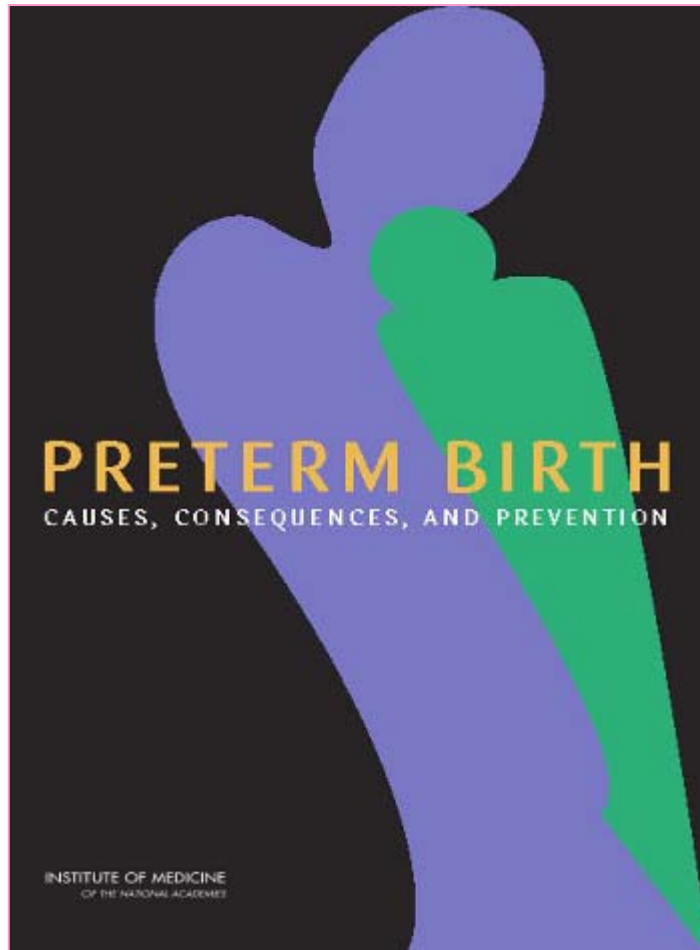


# Leading Causes of Neonatal Mortality United States, 2004



NCHS, *Deaths: Leading Causes for 2003*. National Vital Statistics Reports 55(10), March 2007.

## Institute of Medicine Report, 2006



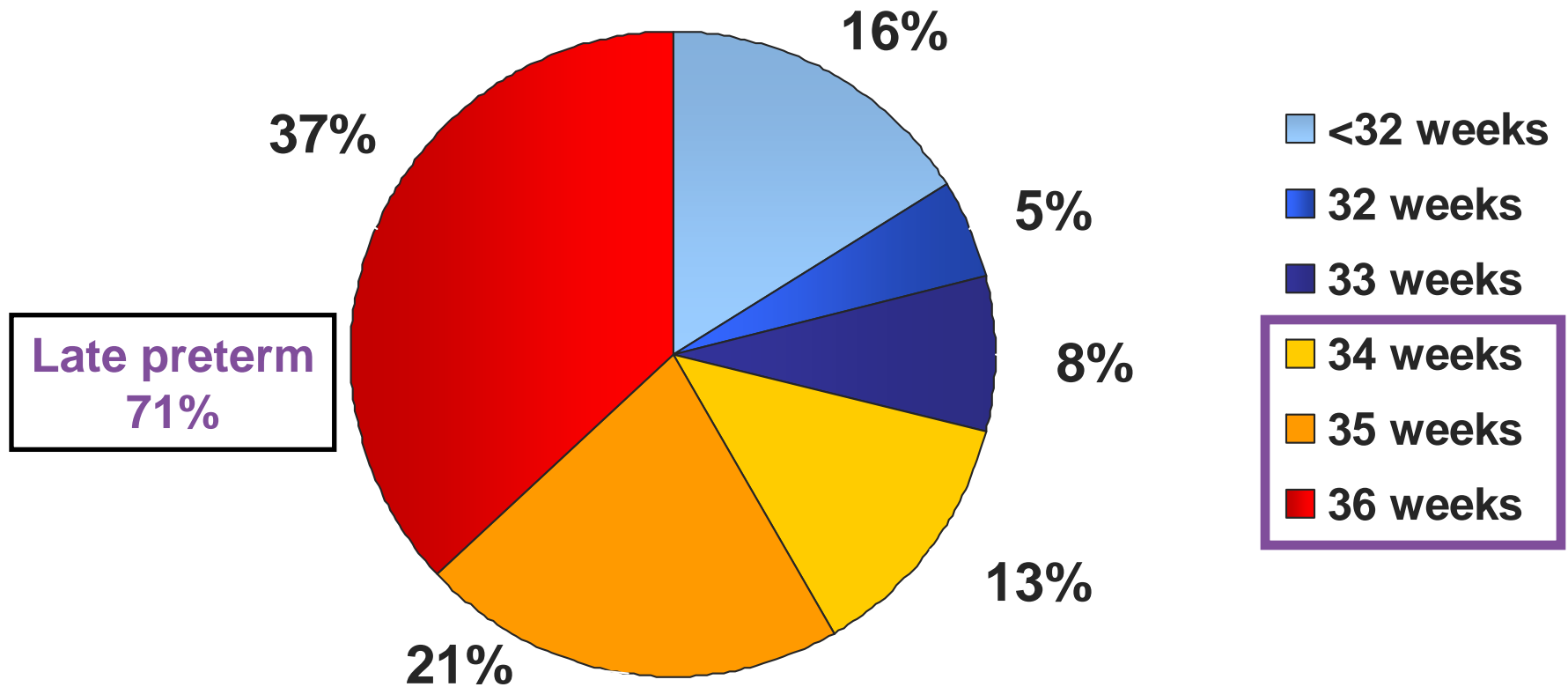
The IOM estimates the total national cost of premature births to be *at a minimum \$26.2 billion*. This estimate includes many costs, such as in-patient hospital costs, lost wages and productivity and early intervention programs.

## Preterm Birth Rates by Race and Education, IOM 2006

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Years of Ed	NonHispanic Black	NonHispanic White	Asian Pacific Isl	American Indian	Hispanic
< 8	19.6	11.0	11.5	14.8	10.7
8-12	16.8	9.9	10.5	11.8	10.4
13-15	14.5	8.3	9.1	9.9	9.3
≥16	12.8	7.0	7.5	9.4	8.4

# Preterm Births by Week of Gestation United States, 2004



Source: National Center for Health Statistics, 2004 final natality data  
Prepared by March of Dimes Perinatal Data Center, 2007

# Preterm Birth Rates by Delivery Method US, 1996 and 2004

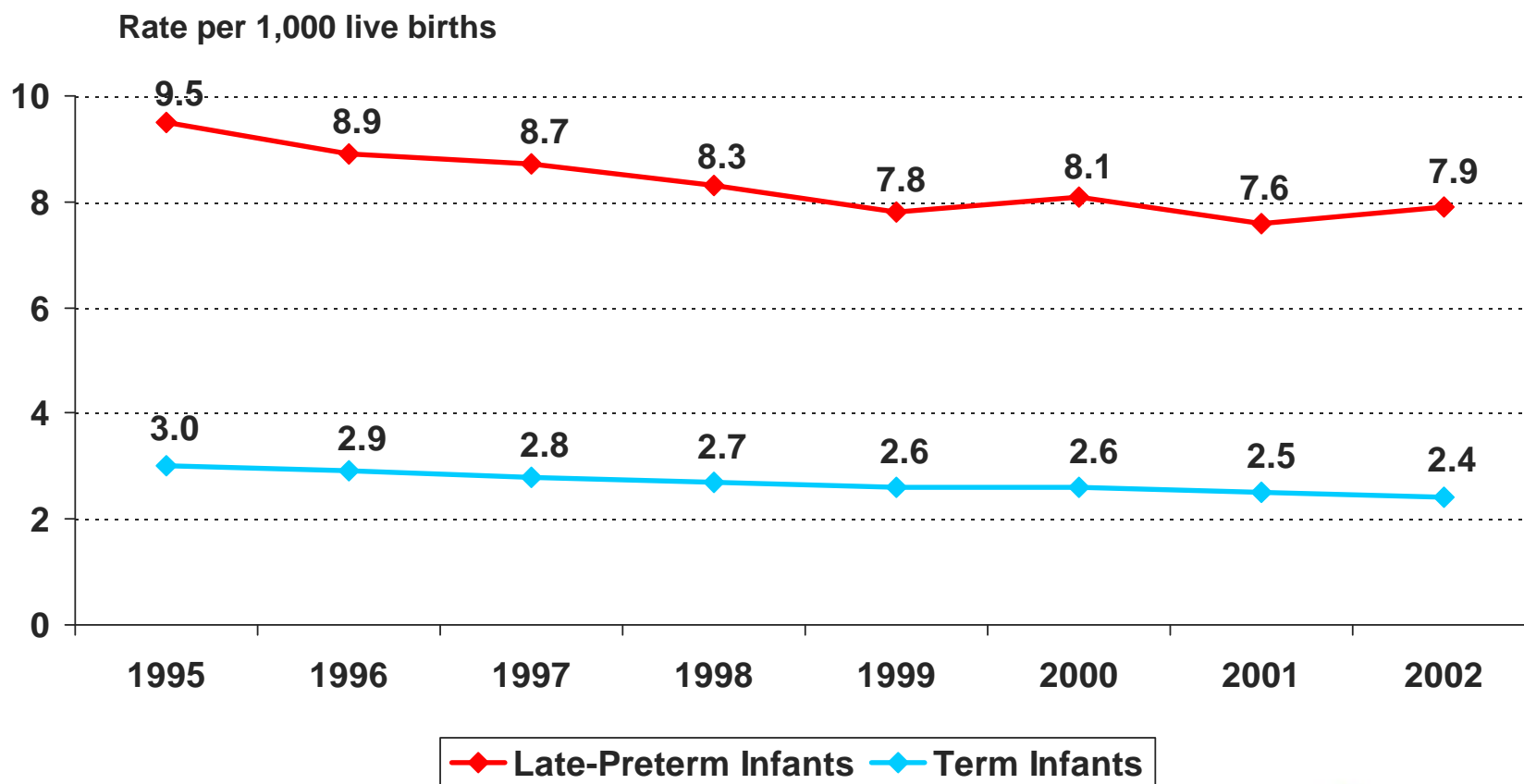
60,000 additional singleton preterm births

	Vaginal			Cesarean section		
	1996	2004	Absolute difference	1996	2004	Absolute difference
<b>Preterm</b>	263,520	268,172	4,652	91,477	145,882	54,405
<b>Total births</b>	2,944,204	2,802,472	-141,732	722,756	1,071,082	348,326
<b>Preterm birth rate</b>	9.0%	9.6%	0.6%	12.7%	13.6%	0.9%

Bettegowda VR, Dias T, Davidoff MJ, Damus K, Callaghan WM, Petrini JR. The relationship between cesarean delivery and gestational age among US singleton births. *Clinics in Perinatology*. 2008;35: 309–323.



# Infant Mortality among Late Preterm and Term Singletons, United States, 1995 - 2002



Late preterm is between 34 and 36 weeks gestation

Source: National Center for Health Statistics, period linked birth/infant death data

Prepared by March of Dimes Perinatal Data Center, 2007



# Prematurity Campaign II

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The March of Dimes Board of Trustees met in March 2008 and agreed to the extension of the Prematurity Campaign. They unanimously agreed the March of Dimes should:

1. Declare “Prematurity Prevention” a global campaign, and extend to 2020. Retain the goals of 15% reduction in rate and increased awareness for the U.S. Set global targets by 2010

# Prematurity Campaign II

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## 2. Assume a more outspoken public stance on issues directly related to prematurity prevention

- Create a more powerful Prematurity Awareness Month in November. A national *Prematurity Report Card* will be developed in 2008 to put a spotlight on the incidence of prematurity
- Target big drivers of preterm birth such as rising rates of Cesarean sections and certain ART practices
- Use Surgeon General's Conference, June 2008, as a platform for launch of Prematurity Campaign 2020

# Prematurity Campaign II

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3. Focus on three critical investment opportunities and intervention targets with a three year horizon

# Prematurity Campaign II

## Focus on Critical Investments

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### Accelerate research:

- Expand Prematurity Research Initiative (PRI) to determine underlying causes of preterm birth (currently \$3.5M per annum)
- Assist the WHO consortium to identify financial support to analyze worldwide genetic associations to preterm birth
- Identify additional private funding partners

# Prematurity Campaign II

## Focus on Critical Investments

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**Expand direct service to NICU affected families:**

- These families will help to build a constituency for the campaign
- Increase the number of NICU Family Support Programs to at least 100 sites by 2010, and develop new models for extending this program

# Prematurity Campaign II

## Focus on Critical Investments

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Implement Community Programs based on the findings Healthy Babies Are Worth the Wait Project

- Identify best practices that will help to define effective strategies for community-based regional interventions to decrease premature birth
- MOD chapters will be encouraged to develop local, regional, or statewide programs to decrease prematurity through partnering with professional groups, consumer organizations, and public health professional departments

# Goals of the Report Card

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To create an awareness of the increase in incidence of preterm births as a nation and as individual states

To address issues related to prematurity including :

- Access to quality healthcare
- Research into the causes and factor related to prematurity
- Prevention of preterm births in pregnant women, through knowledge and intervention
- Advocate for work policies that accommodate pregnancy

# Premature Birth Report Card Grades - Methodology

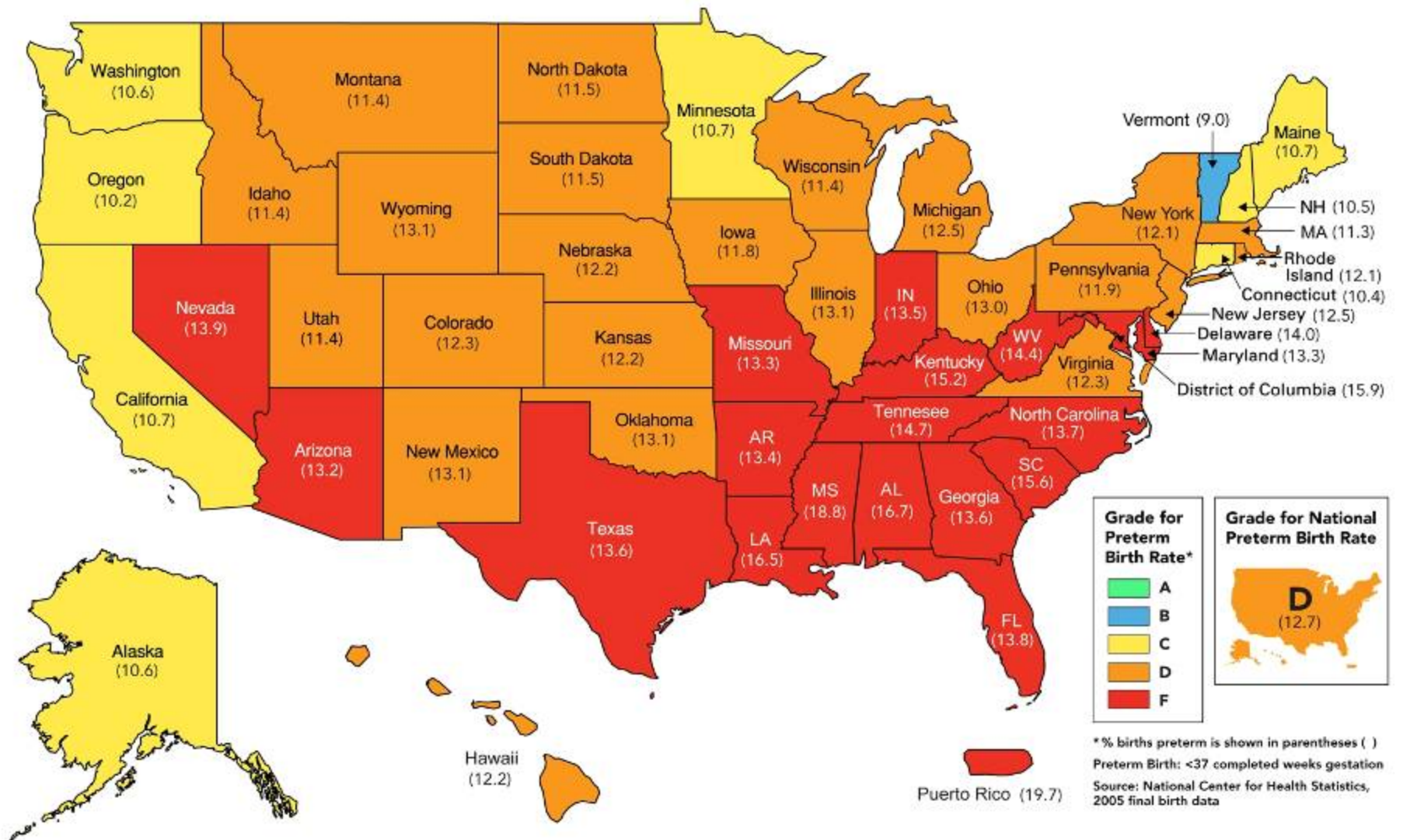
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Based on distance from Healthy People 2010 goal - measured in standard deviations.

- A Less than or equal to 7.6%
- B Between 7.6% and 1 standard deviation above
- C Greater than 1, but less than 2 standard deviations above 7.6%
- D Greater than 2, but less than 3 standard deviations above 7.6%
- F 3 or more standard deviations above 7.6%



## 2008 Premature Birth Report Card



**Grade for Preterm Birth Rate\***

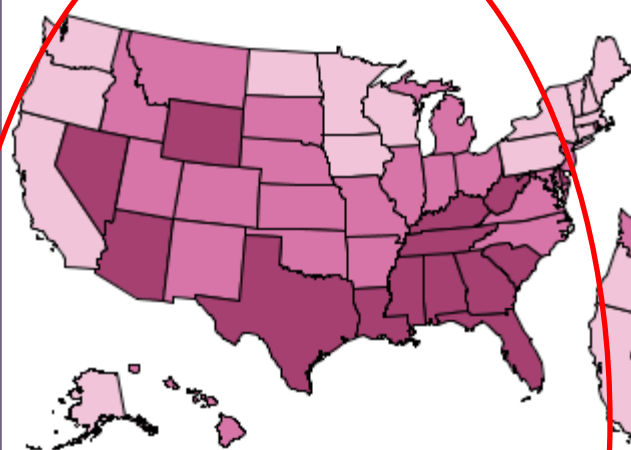
- A (Green)
- B (Blue)
- C (Yellow)
- D (Orange)
- F (Red)

**Grade for National Preterm Birth Rate**

D (12.7)

\* % births preterm is shown in parentheses ( )  
Preterm Birth: <37 completed weeks gestation  
Source: National Center for Health Statistics, 2005 final birth data

### 3 Major Factors Affecting Preterm Birth Rates: Late Preterm Births, Smoking, and Uninsured Women of Childbearing Age,

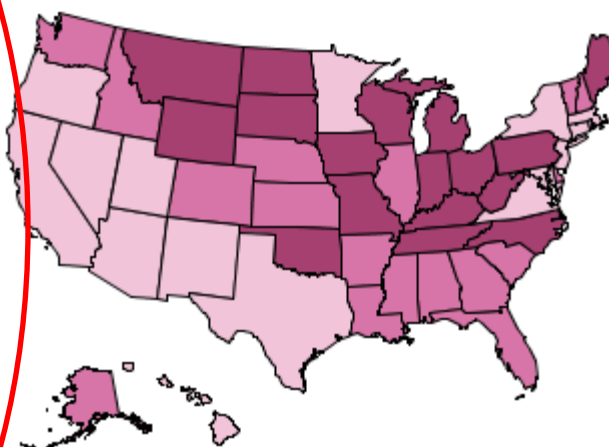


Percent of live births

- Over 9.6 (15)
- 8.6-9.6 (21)
- Under 8.6 (15)

**Late preterm: US, 2005**

**US 9.1%**

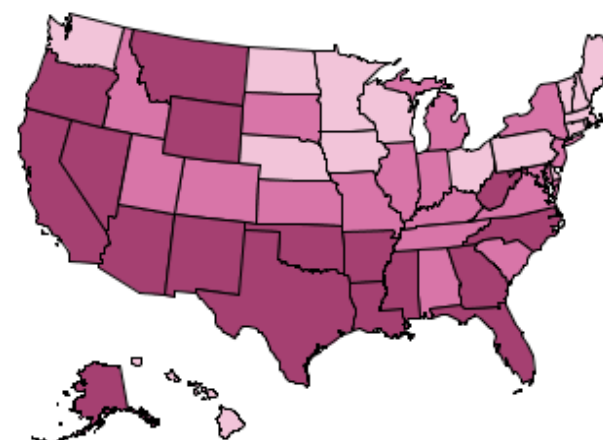


Percent of women ages 18-44

- Over 23.4 (17)
- 19.0-23.4 (17)
- Under 19.0 (17)

**Smoking among women of  
childbearing age, US, 2007**

**US 21.2%**



Percent of women ages 15-44

- Over 21.3 (17)
- 15.2-21.3 (17)
- Under 15.2 (17)

**Uninsured women:  
US, 2005-2007 Avg**

**US 20.1%**

**march of dimes**  
2008 Premature Birth  
Report Card

United States  
Preterm Birth Rate: 12.7%  
Grade: D

<b>Selected Contributing Factors</b>	<b>Rate (%)</b>	<b>Comments</b>
<b>Uninsured Women</b>	20.1	About 1 in 5 women of childbearing age in Missouri has no health insurance coverage. Health care access before and during pregnancy can help identify and manage conditions that contribute to preterm birth.
<b>Women Smoking</b>	21.2	About 1 in 5 women of childbearing age in Missouri is a smoker. Smoking cessation programs can reduce the risk of preterm birth.
<b>Late Preterm Births</b>	9.1	About 1 in 11 live births in Missouri is late preterm (34-36 weeks gestation). The rise in late preterm births has been linked to rising rates of early induction of labor and cesarean sections.



## 2008 Premature Birth Report Card

Missouri  
Preterm Birth Rate: 13.3%  
U.S. Rank: 34th  
Grade: F\*

Selected Contributing Factors	Rate (%)	Comments
Uninsured Women	18.2	About 1 in 6 women of childbearing age in Missouri has no health insurance coverage. Health care access before and during pregnancy can help identify and manage conditions that contribute to preterm birth.
Women Smoking	27.4	About 1 in 4 women of childbearing age in Missouri is a smoker. Smoking cessation programs can reduce the risk of preterm birth.
Late Preterm Births	9.6	About 1 in 10 live births in Missouri is late preterm (34-36 weeks gestation). The rise in late preterm births has been linked to rising rates of early induction of labor and cesarean sections.

## Prematurity Campaign: A Community Problem Requires Community Solutions

### The problem for the baby

Preterm infants (8%) consumed 47% of infant (<1 year of age) costs  
and 27% of all pediatric (<18 years of age) costs (2001)

Prolonged hospitalization with increased costs

12.9 days vs. 1.9 days: \$15,100 vs. \$600 (2001)

Optimistic but unclear long term outcome of prematurity

### The problem for the family

Insurance coverage may require significant family resources

Lost income from work due to prolonged hospitalization

Change in family dynamic for other siblings

Protected child syndrome

### The problem for the employer and business community

Health insurance exposure

Loss of employee expertise during maternity leave and subsequent  
multiple medical visits and re hospitalizations

### The problem for the school system

Increased likelihood of special needs students

### The problem for state and federal government

More than 50% of premature infants are covered by Medicaid

### The problem for the health insurance payer

High resource utilization

## Action Items for a Missouri Prematurity Campaign to Reduce the Rate of Prematurity

- 1) Physician Commitment to Excellence in Perinatal Care – No elective induction or cesarean section prior to 39 completed weeks of gestation without evidence of fetal lung maturity (ACOG Practice Bulletin No. 10, November, 1999)
  - a) Support the use of first trimester ultrasound to increase accuracy of dating when considering induction or cesarean section (recommended by the Institute of Medicine Report on Preterm Birth (2006))
- 2) Hospital Commitment to Excellence in Perinatal Care – No elective induction or cesarean section prior to 39 completed weeks of gestation without evidence of fetal lung maturity
  - a) Implement retrospective peer review of decisions to deliver and outcomes of babies less than 39 weeks gestation by pediatric assessment
  - b) Develop a “booking form” to prompt the physician who is scheduling an elective delivery to define the gestational age and justify early delivery
- 3) Partner with health insurance payers to recognize hospitals and physicians that make the Commitment to Excellence in Perinatal Care

- 4) Increase availability of smoking cessation interventions for pregnant women throughout Missouri
  - a) Advocate for legislative use of tobacco fund resources
  - b) Recognize hospitals and physicians that reduce rate of smoking before and during pregnancy
- 5) Partner with health insurance payers to recognize businesses that support maternal and infant health by
  - a) Providing information via email, directed websites, brochures, classes, or library about preconception, prenatal, postnatal, and infant health
  - b) Providing reasonably flexible work hour scheduling to accommodate prenatal, postnatal, and infant appointments
  - c) Providing reasonable physical accommodation for pregnant employees where they can rest with feet elevated
  - d) Providing private area where lactating women can pump and store breast milk
  - e) Providing access to health insurance coverage that includes preconception care, prenatal care, childbirth, and postnatal care including immunizations and maternal depression screening