

# Childbirth as a Public Health Issue in the U.S.

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Three Perspectives on Technology  
and Childbirth in America

Women's Studies Program

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  - National Center for Health Statistics (MacDorman & Menacker)
  - Childbirth Connection (Sakala & Corry)

# Criteria for Assessing Public Health Problems

- **Severity of Outcomes**
- **Prevalence and Trends**
- **Costs**
- **Public Attitudes**
- **Changeability**

**NOTE:** Only looking at one issue, not prioritizing among many

# **Severity of Outcomes**

***How does the U.S. fare in cross national comparisons?***

# Outcomes: Comparative Neonatal Mortality Rates

Rank	Country	Rank	Country	Rank	Country
1	Iceland		Sweden		Portugal
	Japan	16	Australia		Switzerland
	Singapore		Austria		United Kingdom
4	Andorra		Belarus	32	Bahrain
	Belgium		Canada		Brunei
	Cyprus		Denmark		Cuba
	Czech Republic		Germany		Estonia
	Finland		Greece		Ireland
	France		Israel		Qatar
	Monaco		Italy		Korea
	Norway		Luxembourg		Slovakia
	San Marino		Malta		United Arab Emirates
	Slovenia		Netherlands		<b>United States</b>
	Spain		New Zealand		

Source: UNICEF. 2009 *The State of the World's Children. Table 1*

# Outcomes: Comparative

Rank	Country	Rank	Country
1	<b>Iceland</b>		<b>Sweden</b>
	<b>Japan</b>	16	<b>Austria</b>
	<b>Singapore</b>		<b>Austria</b>
4	<b>Andorra</b>		<b>United Kingdom</b>
	<b>Belgium</b>		<b>32 Bahrain</b>
	<b>Cyprus</b>		<b>Brunei</b>
	<b>Czech Republic</b>		<b>Cuba</b>
	<b>Finland</b>		<b>Estonia</b>
	<b>France</b>		<b>Ireland</b>
	<b>Monaco</b>		<b>Qatar</b>
	<b>Norway</b>		<b>Korea</b>
	<b>San Marino</b>		<b>Slovakia</b>
	<b>Slovenia</b>		<b>United Arab Emirates</b>
	<b>Spain</b>		<b>United States</b>
			<b>New Zealand</b>

## TWO PROBLEMS

- (1) *Comparisons* – Seven countries highlighted had fewer combined births than the state of New Mexico
- (2) *Measurement* – Is neonatal mortality the best measure to use?

*Each of those countries has fewer births than BWH.*

Source: UNICEF. 2009 *State of the World's Children*. Table 1

<b>17 Comparison Countries</b> (OECD, Health Data 2009)	2006 Total Births (000)	2007 Total exp. health – PC, US\$ PPP	2006 % Births by Cesarean
<b>Australia</b>	267	3 321	30.3
<b>Belgium</b>	121	4 389	17.8
<b>Canada</b>	350	4 403	26.3
<b>Czech Republic</b>	106	1 141	18.4
<b>France</b>	797	4 491	19.5
<b>Germany</b>	673	4 209	27.8
<b>Greece</b>	112	2 679	NA
<b>Hungary</b>	100	1 019	31.1
<b>Italy</b>	560	3 136	39.7
<b>Japan</b>	1 101	2 759	NA
<b>Korea</b>	452	1 362	30.8
<b>Netherlands</b>	185	4 640	13.8
<b>Portugal</b>	109	1 823	31.0
<b>Spain</b>	481	2 712	26.0
<b>Sweden</b>	106	4 495	17.2
<b>United Kingdom</b>	716	3 867	25.6
<b>United States</b>	<b>4 266</b>	<b>7 290</b>	<b>31.1</b>

# How is the U.S. doing relative to comparison countries?

## Neonatal Mortality Rate

*Infant Deaths in  
First 27 days  
X 1,000*

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*Live  
Births*

## Perinatal Mortality Rate

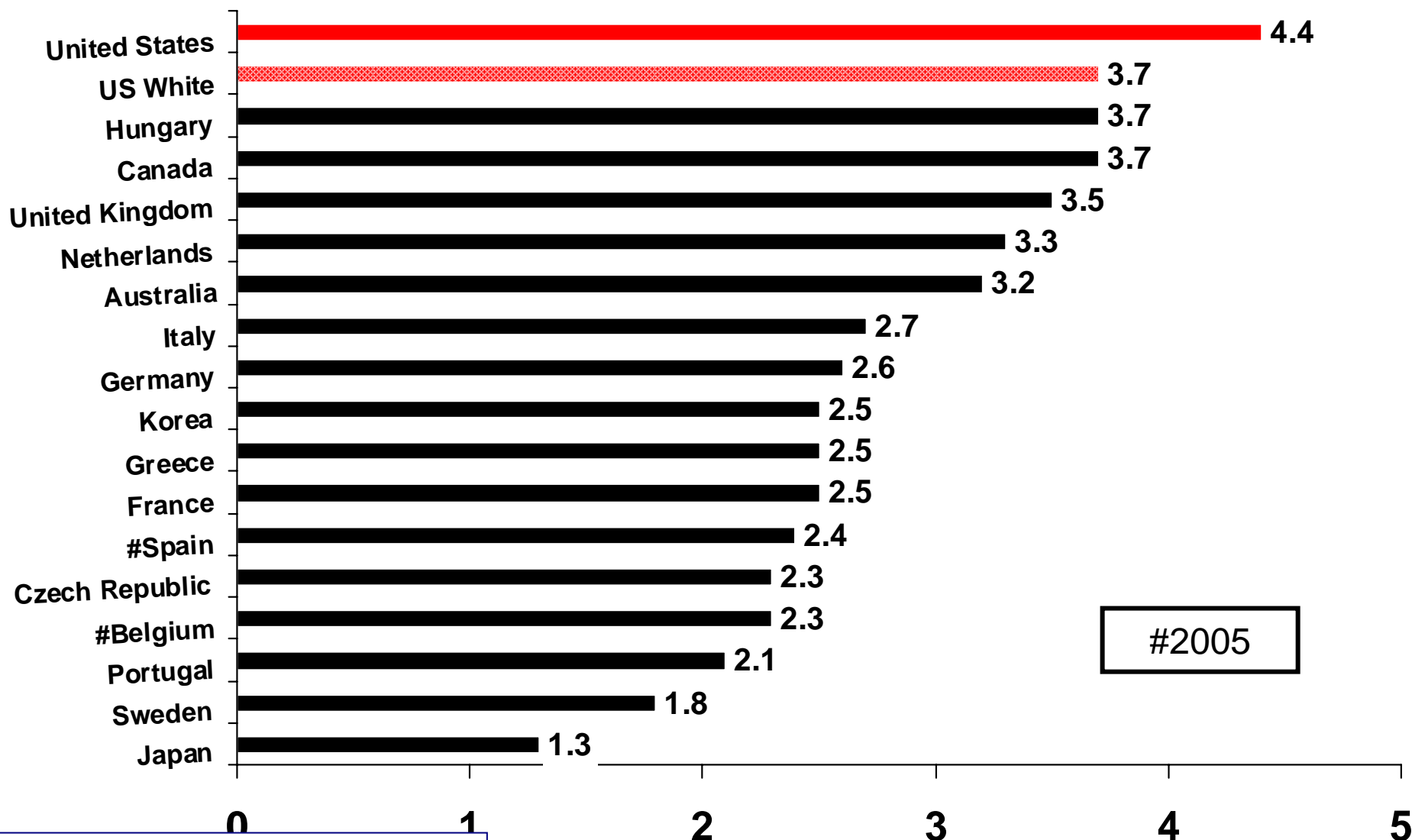
*Fetal deaths + deaths in  
the first week  
X 1,000*

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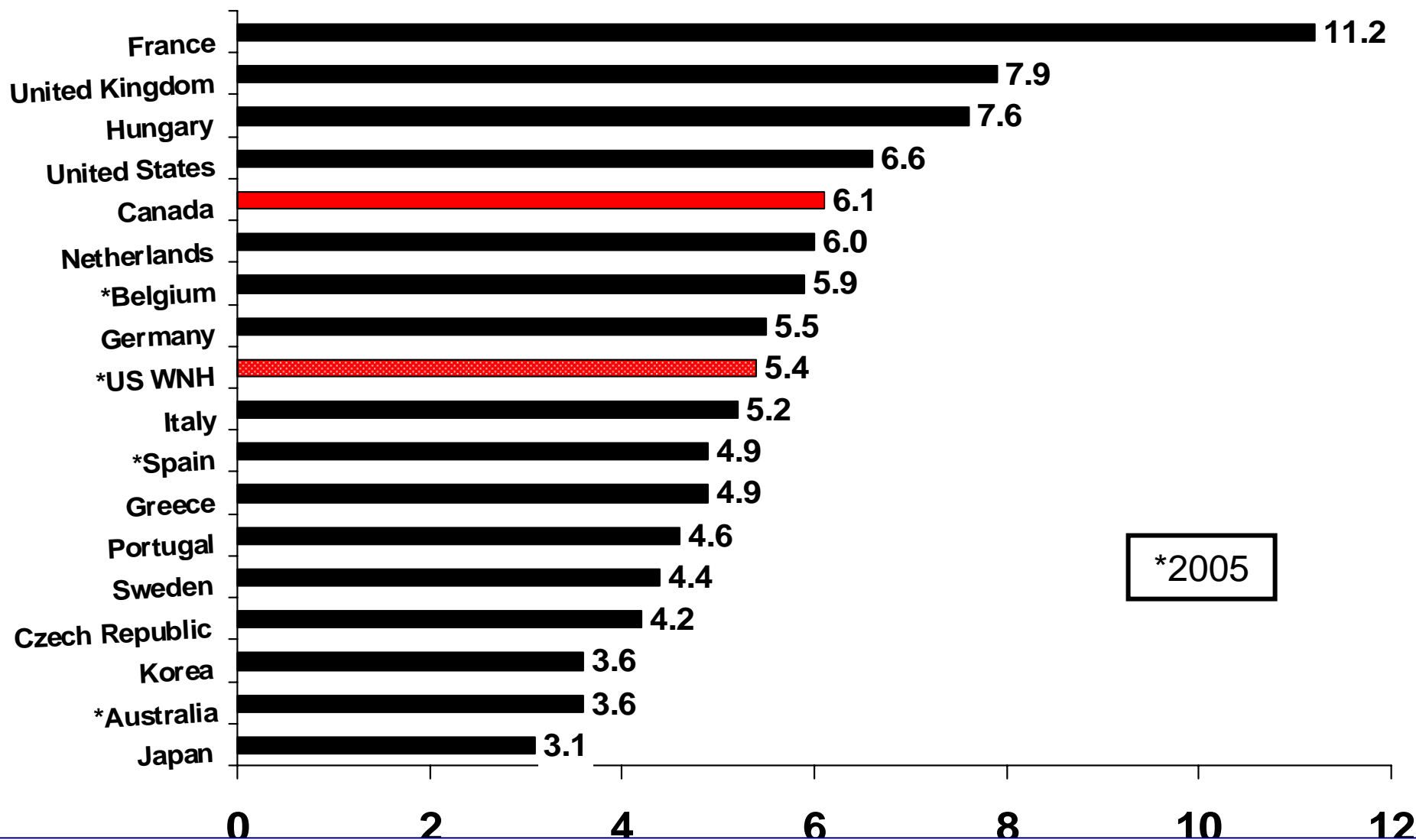
*Live births + fetal  
deaths*



# Neonatal Mortality Rates (per 1,000 births), 2006, Industrialized with 100,000+ Births



# Perinatal Mortality Rates (per 1,000 births), 2006, Industrialized Countries with 100,000+ Births



Source: OECD Health Data 2009; MacDorman MF, Kirmeyer S. Fetal and perinatal mortality, United States, 2005.

# Maternal Mortality Ratios

## Maternal Mortality Ratio

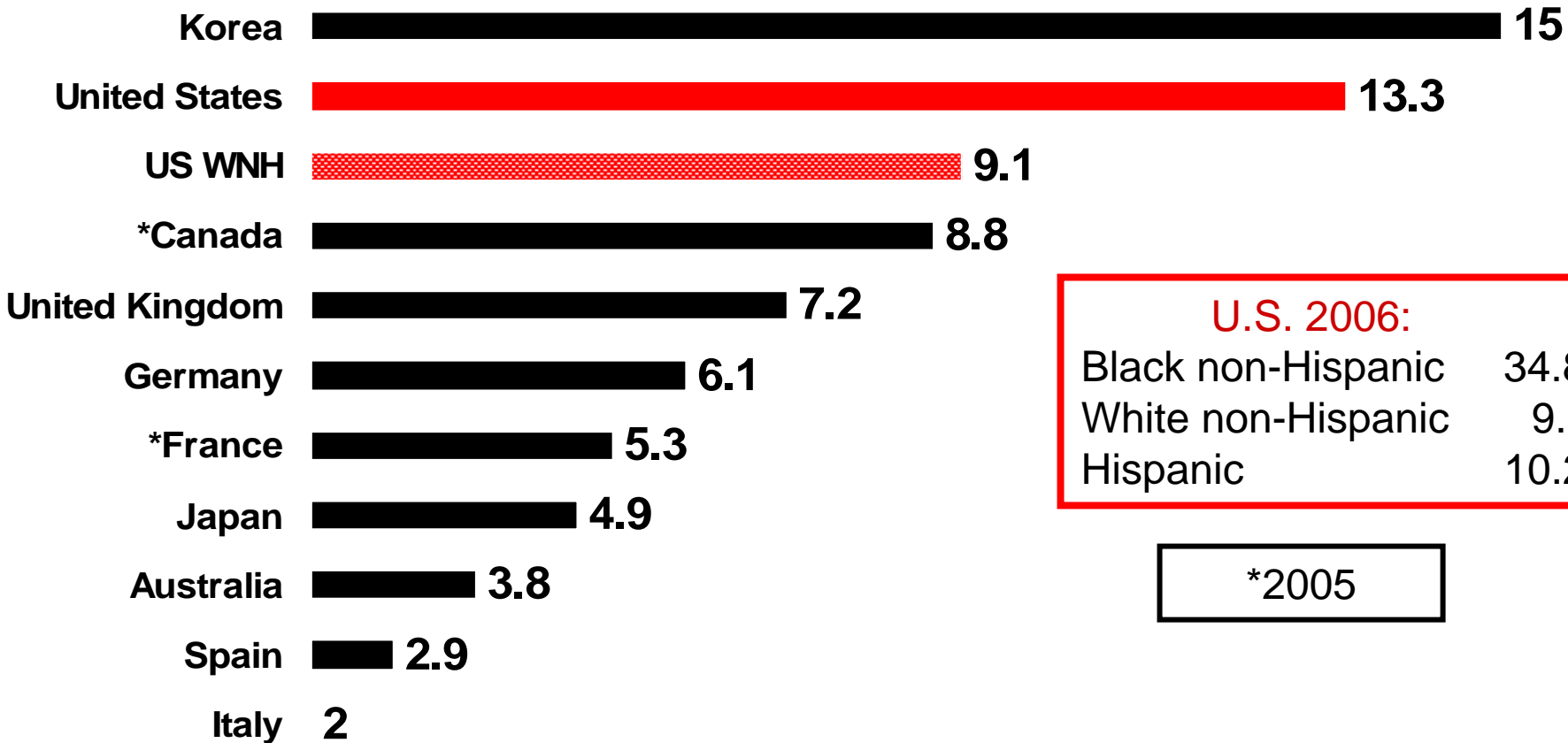
*Maternal Deaths all causes*

*X 100,000*

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*Live births*

# Maternal Mortality Rates, (per 100,000 *births*), 2006, Industrialized Countries with 200,000+ births



**U.S. 2006:**  
 Black non-Hispanic 34.8  
 White non-Hispanic 9.1  
 Hispanic 10.2

\*2005

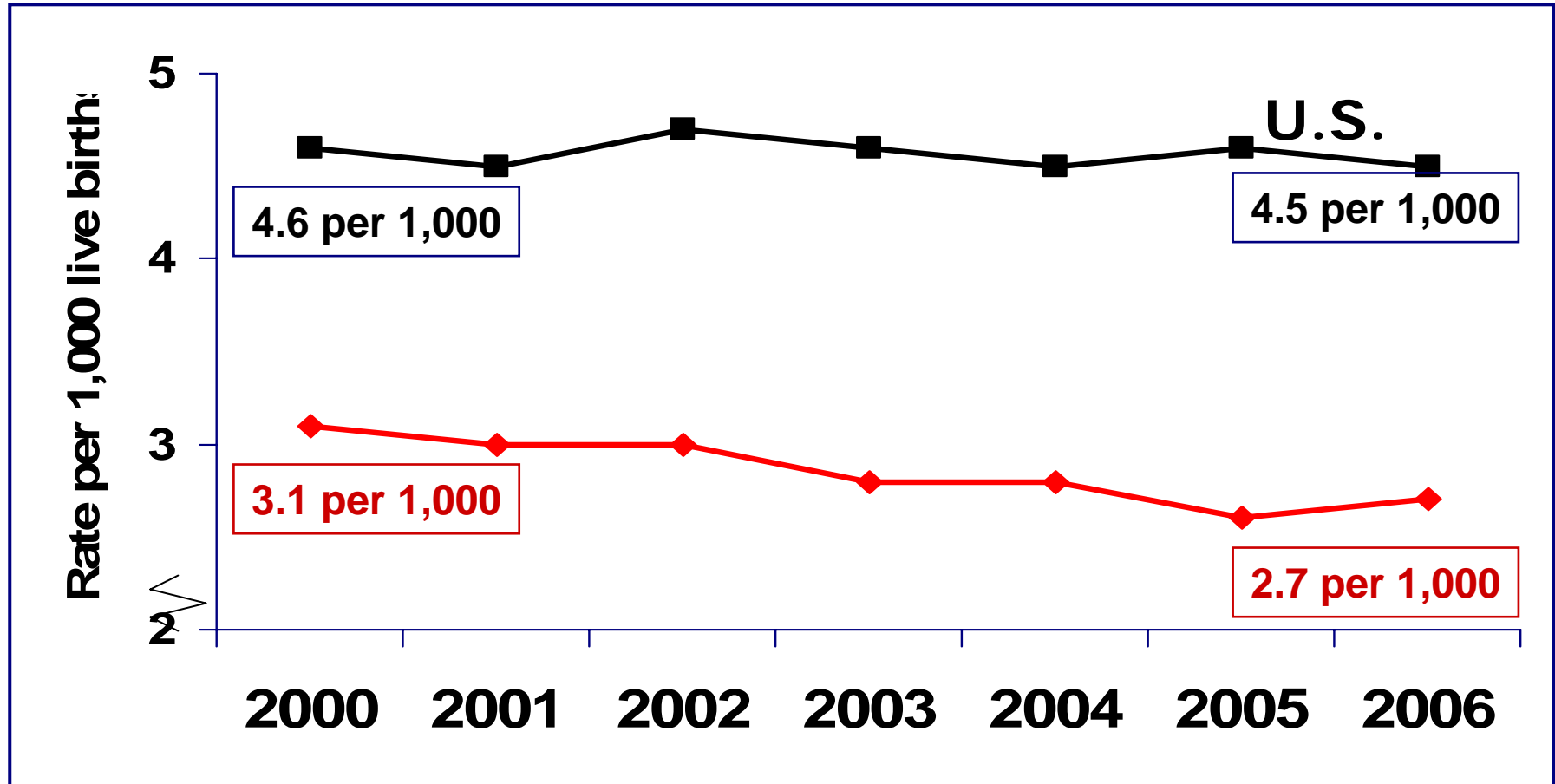
**Maternal Mortality Rate**

Sources: OECD Health Data 2009; NCHS. 2009. *Deaths, Final Data, 2006.*

# Criteria for Assessing Public Health Problems

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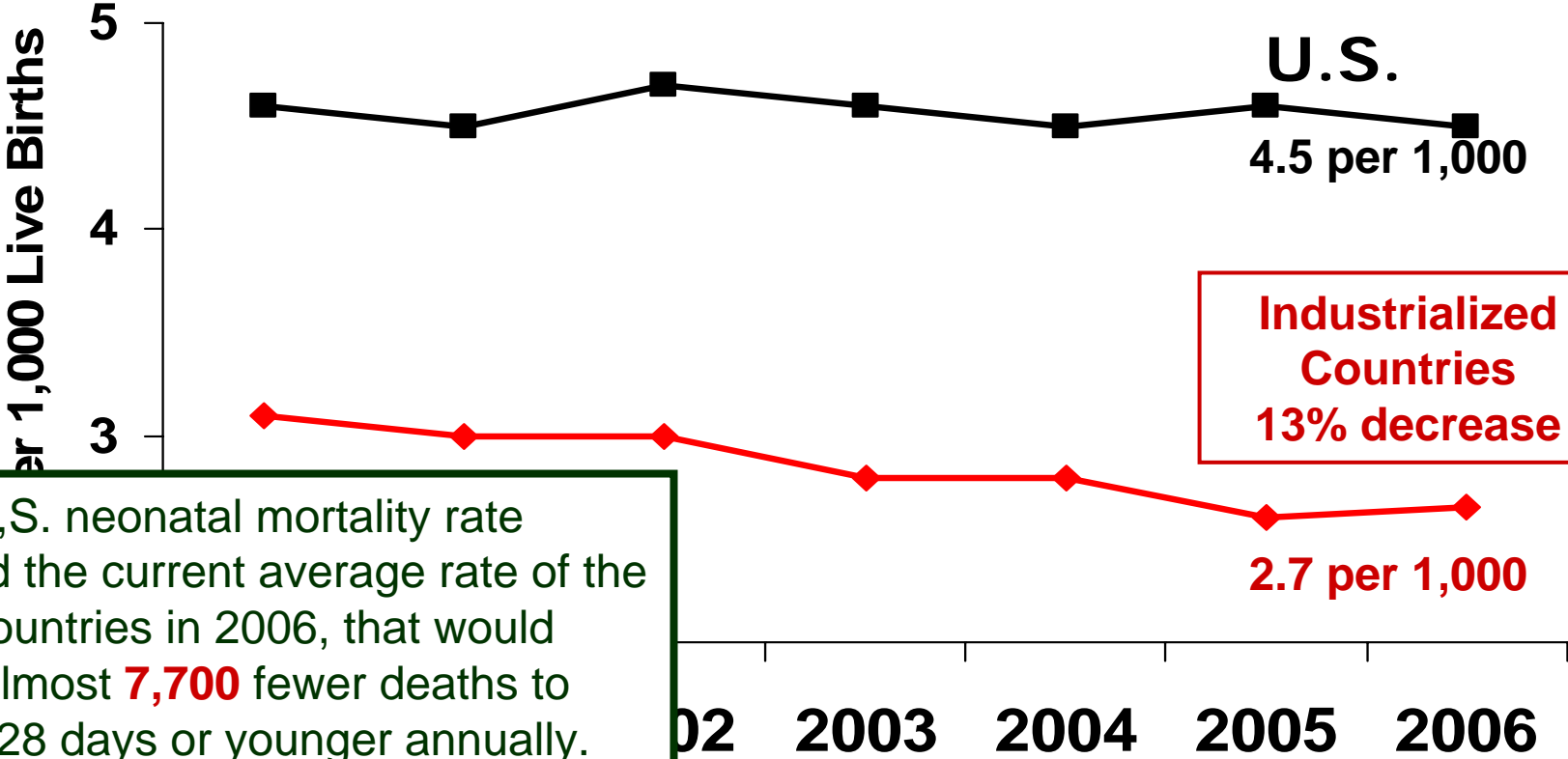
# Neonatal Mortality Rate, 2000-2006, U.S., & Ave. for Industrialized Countries\*



\* Countries with 100,000+ births (2005): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Hungary, Italy, Japan, Netherlands, Portugal, Spain, Sweden, U.K.

Source: OECD Health Data, 2009

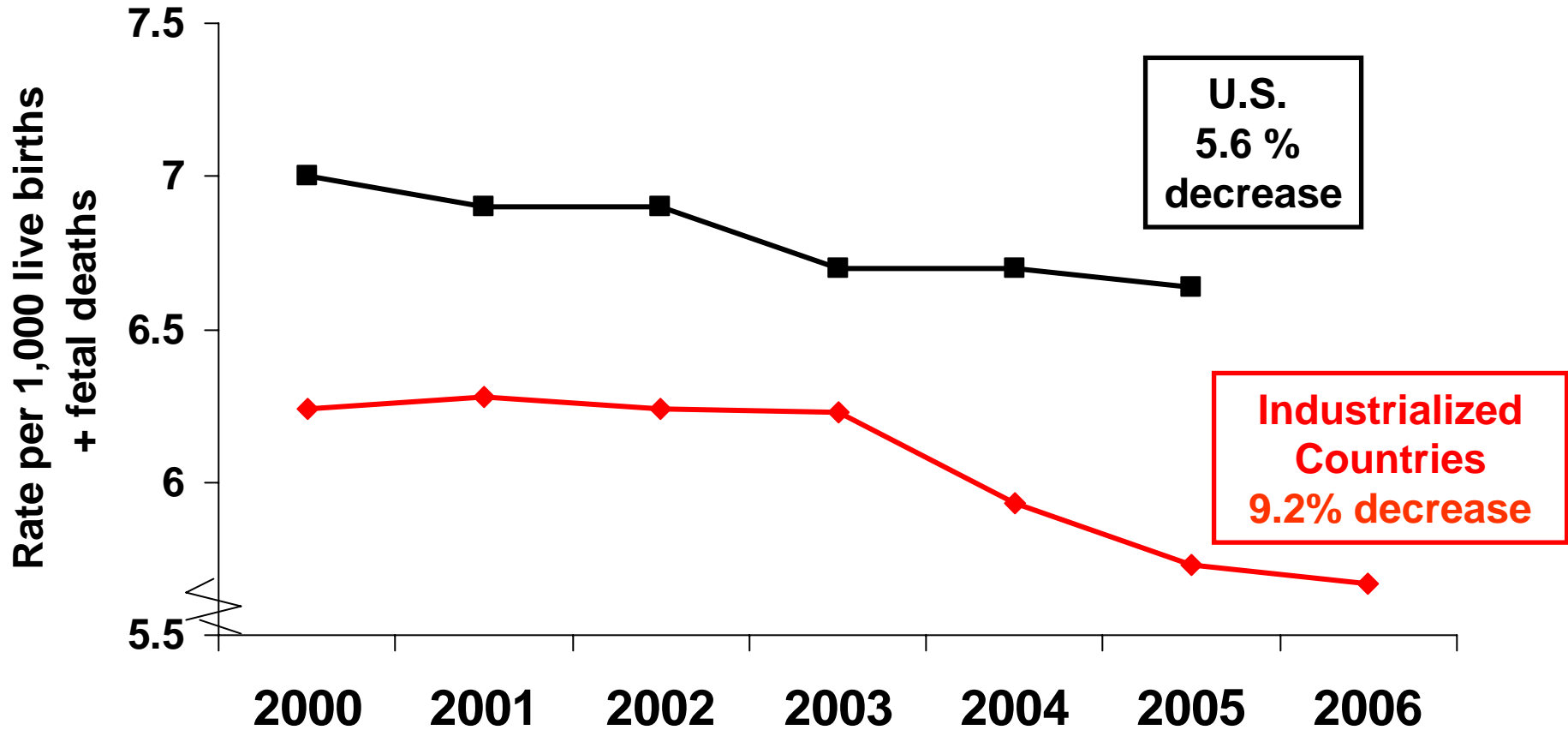
# Neonatal Mortality Rate, 2000-2006, U.S., & Ave. for Industrialized Countries\*



If the U.S. neonatal mortality rate equaled the current average rate of the other countries in 2006, that would mean almost **7,700** fewer deaths to babies 28 days or younger annually.

\* Countries with 100,000+ births (2006): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Hungary Italy, Japan, Netherlands, Portugal, Spain, Sweden, U.K.

# Perinatal Mortality Rates, 2000-2006 , U.S., & Ave. for Industrialized Countries\*

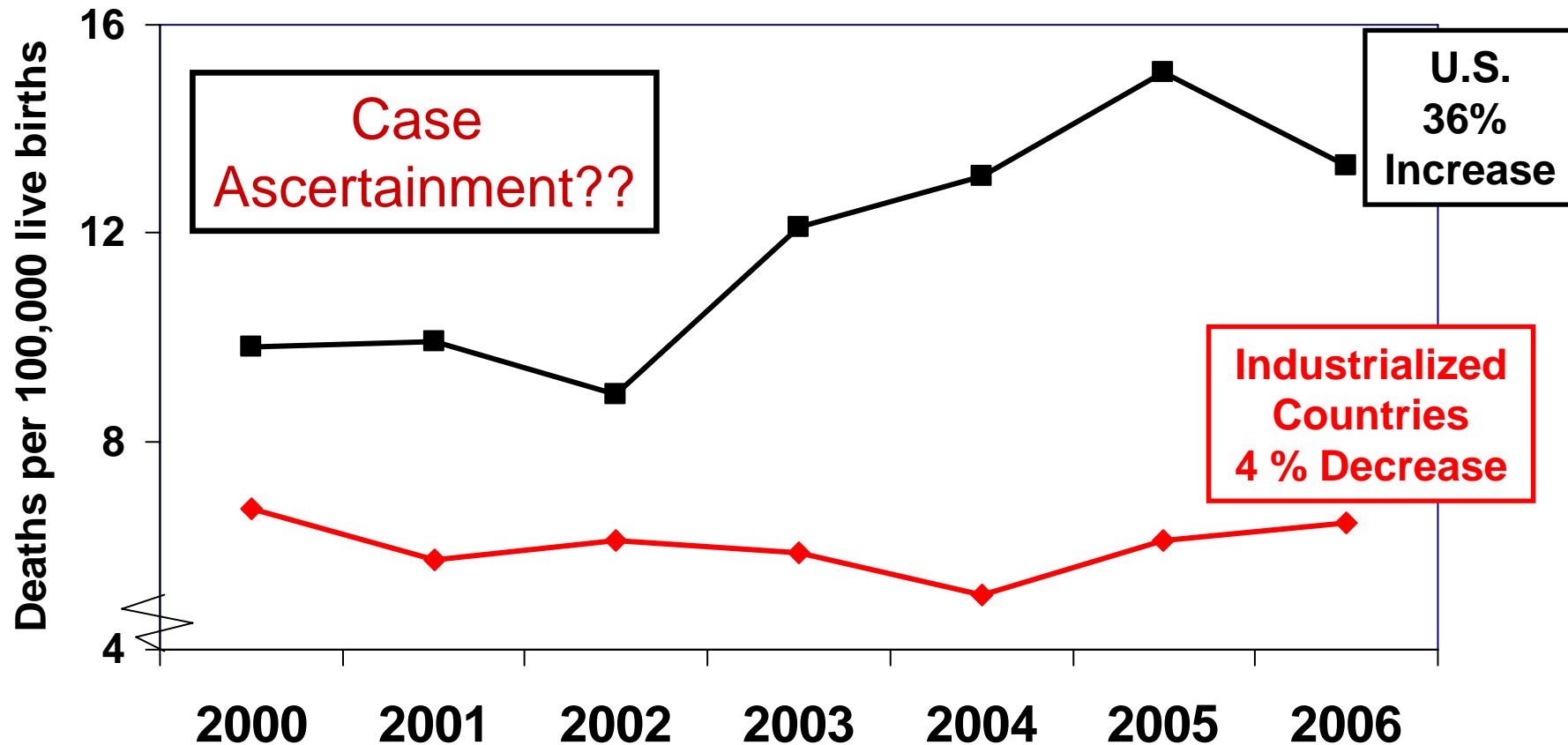


\* Countries with 100,000+ births (2006): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Hungary, Italy, Japan, Netherlands, Portugal, S. Korea, Spain, Sweden, United Kingdom

Source: MacDorman M. *Fetal and Perinatal Mortality, U.S., 2005*. 2009.NCHS V. 57#8 and OECD Health Data 2009



# Maternal Mortality Rates, 2000-2006, U.S. & Ave. Industrialized Countries\*



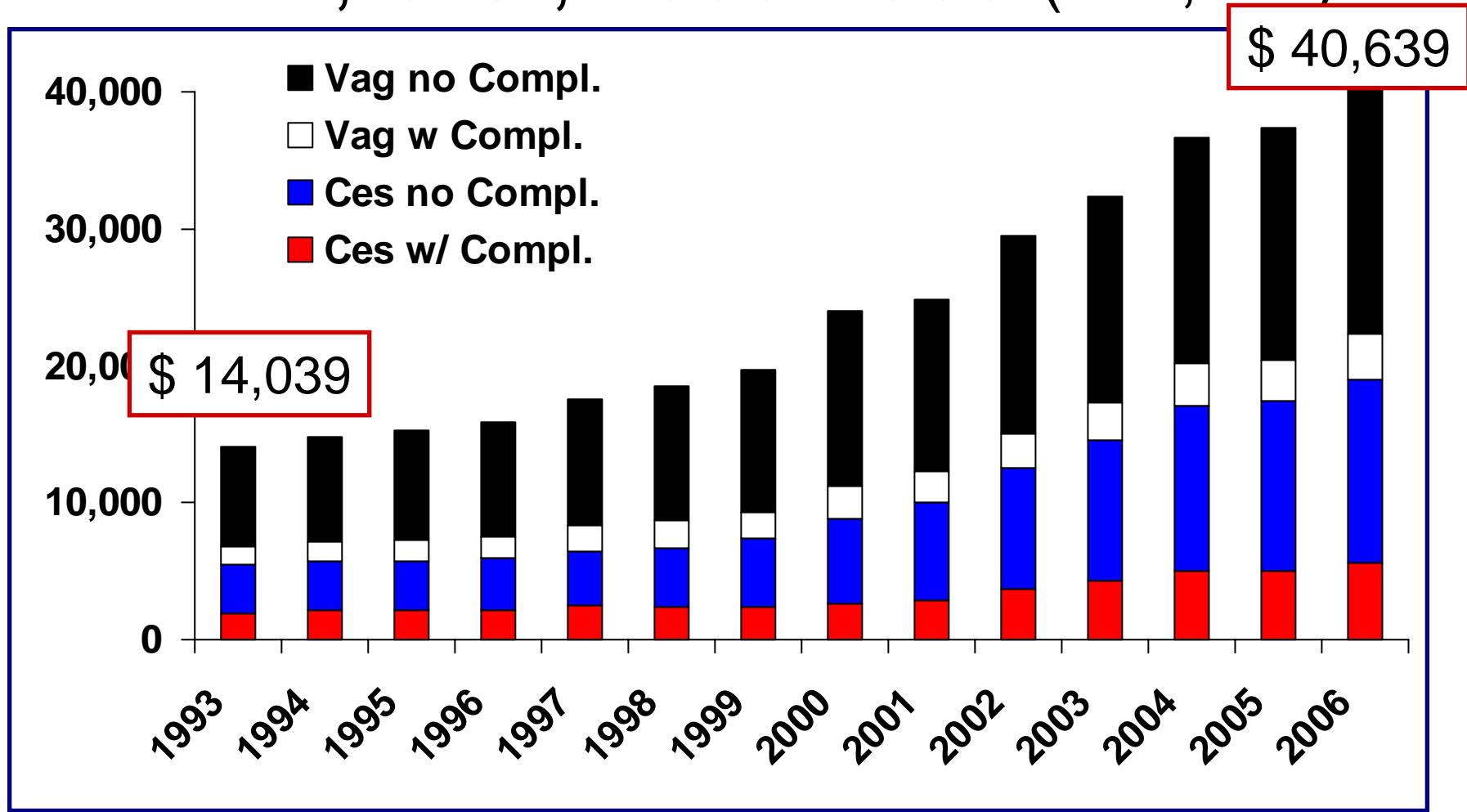
\* Countries with 100,000+ births (2006): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Hungary, Italy, Japan, S. Korea, Netherlands, Portugal, Spain, Sweden, United Kingdom

# Criteria for Assessing Public Health Problems

- **Severity of Outcomes – US comparatively weak**
- **Prevalence & Trends – no improvement**
- **Costs**
- **Public Attitudes**
- **Changeability**

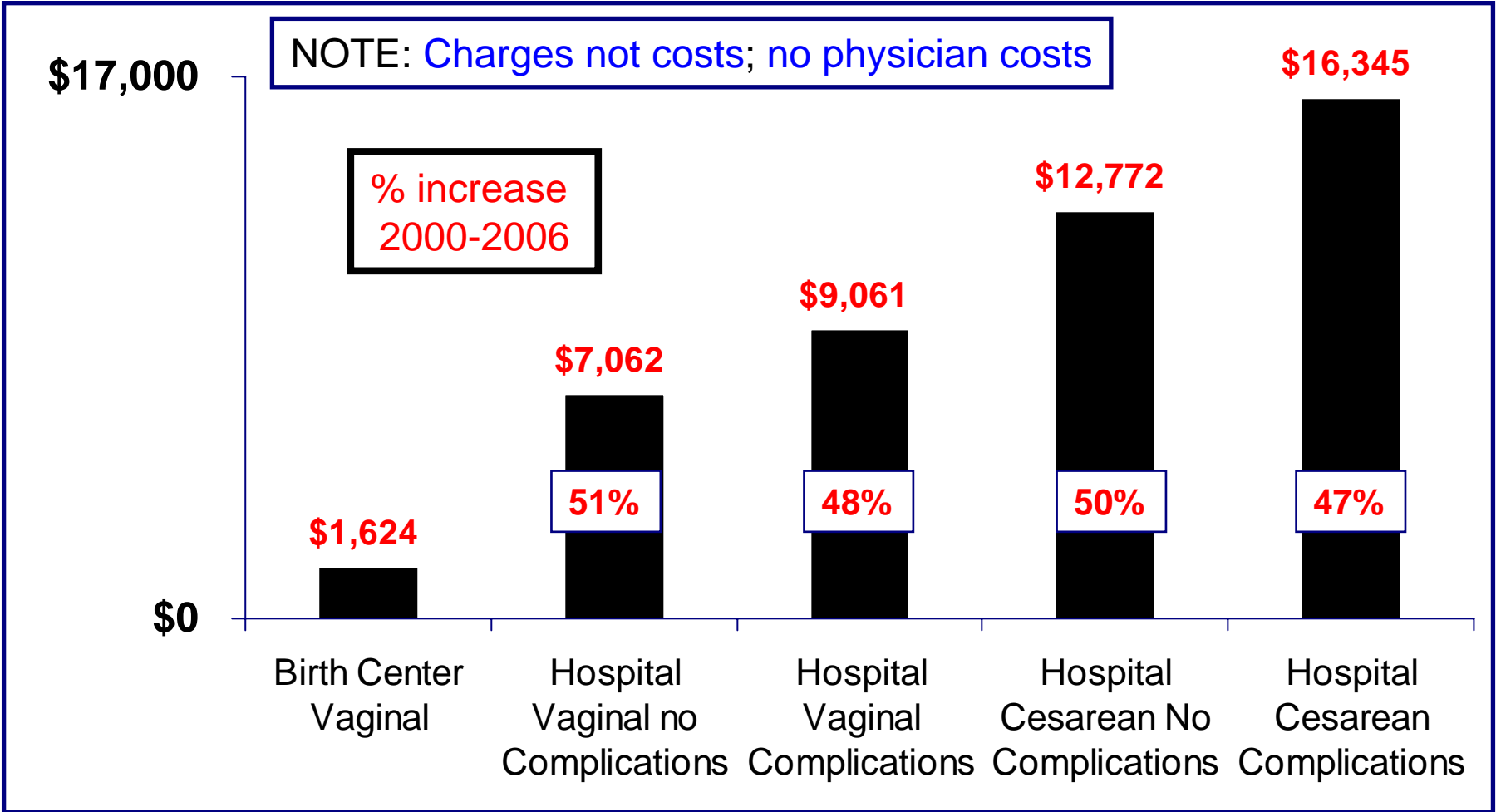


# Estimated Total Charges, Hospital Birth, U.S., 1993-2006 (000,000)



Sources: AHRQ. 2008. *HCUPnet, Healthcare Cost & Utilization Project*. Rockville, MD: AHRQ. <http://hcupnet.ahrq.gov>. Accessed 11/9/08.

# AVERAGE FACILITY LABOR & BIRTH CHARGE BY SITE & MODE OF BIRTH, U.S., 2004—2006

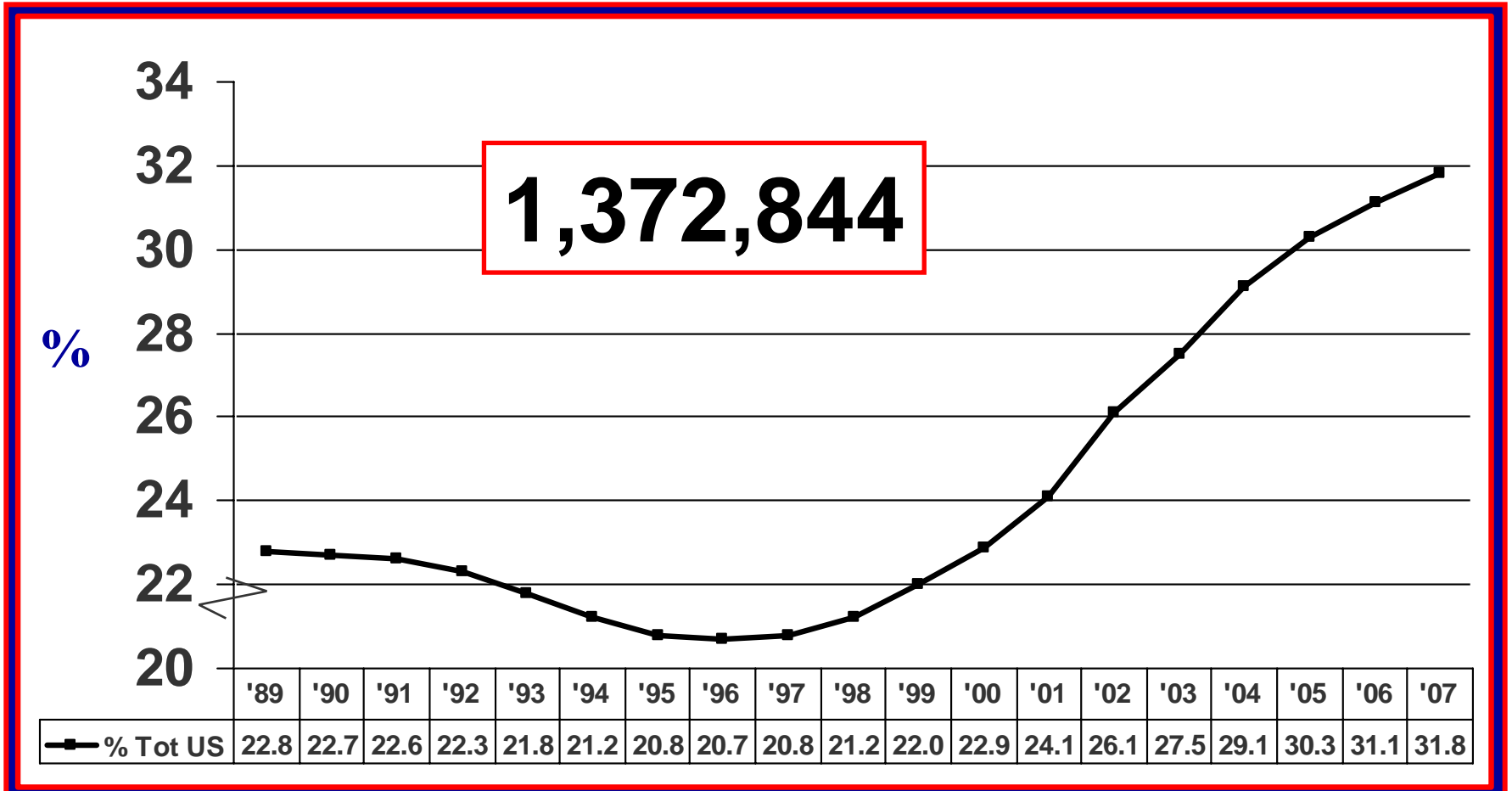


Sources: AHRQ. 2008. *HCUPnet, Healthcare Cost & Utilization Project*. Rockville, MD: AHRQ. <http://hcupnet.ahrq.gov>. Accessed 11/9/08; National Association of Childbearing Centers 2004

# **COSTS AND TRENDS**

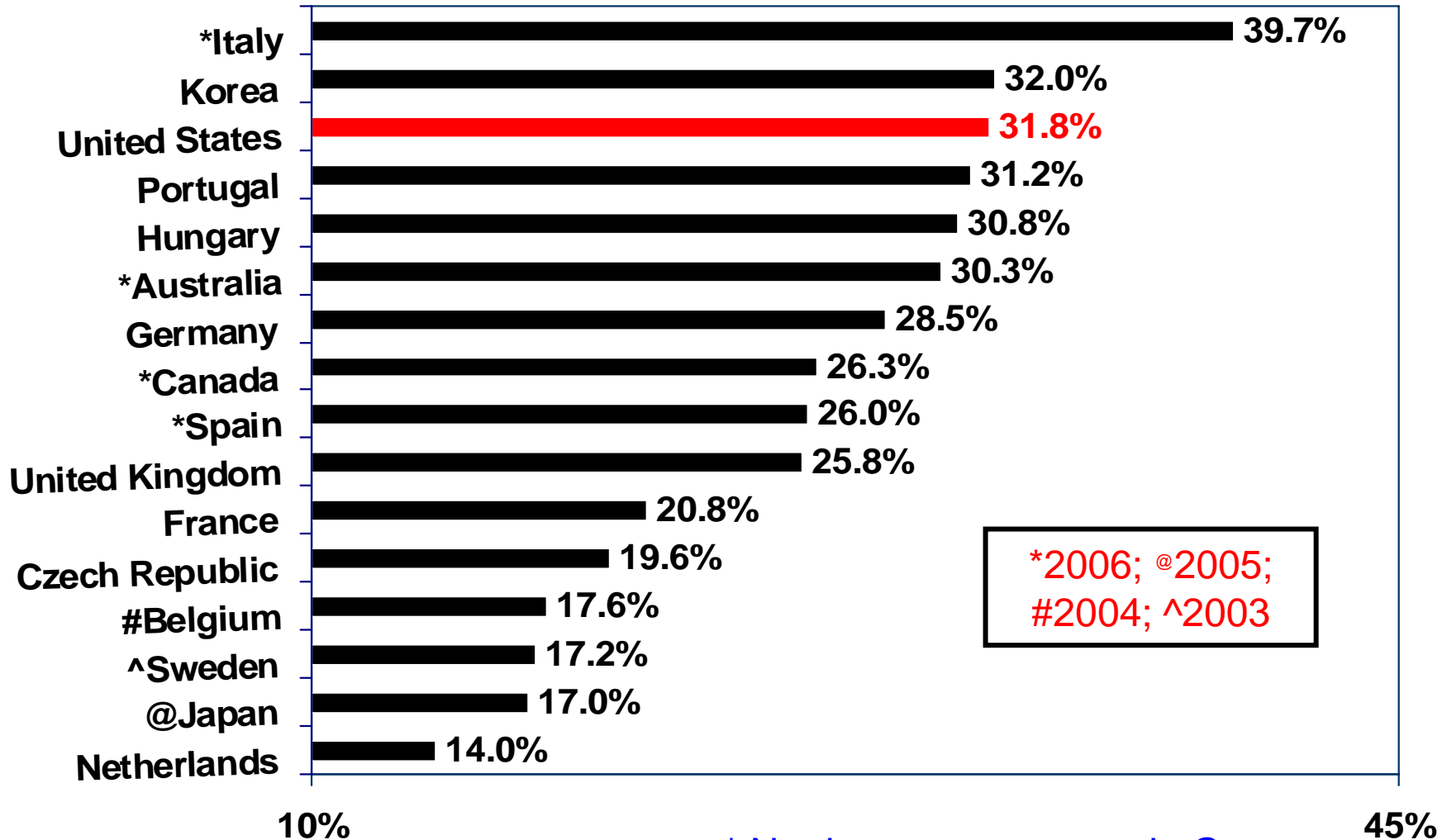
**What's Been the Trend  
in Method of Delivery in  
the U.S.?**

# US Cesarean Rates, 1989-2007



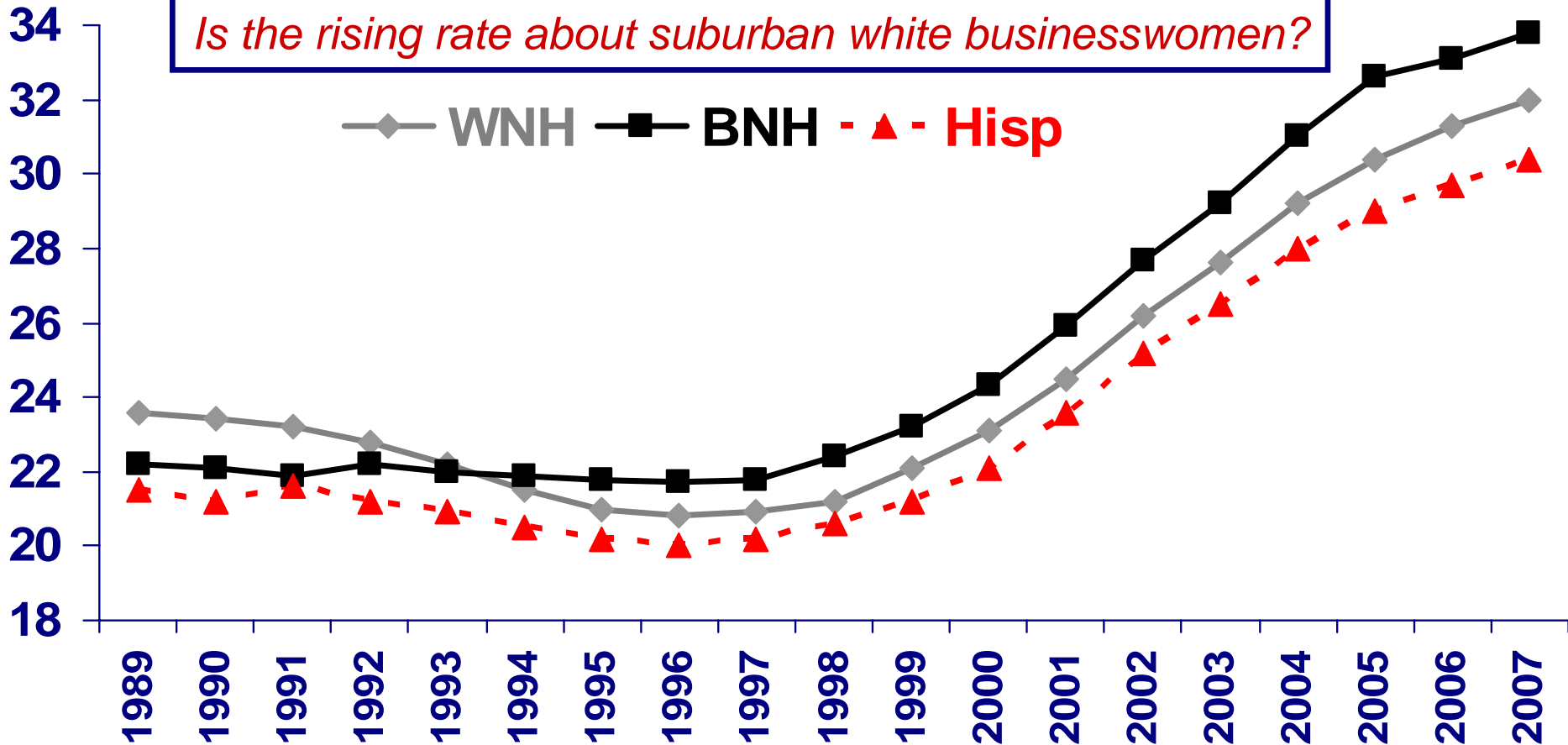
***If the 2007 cesarean rate was the same as in 1996, there would have been 479,000 fewer cesareans in the U.S. in '07.***

# Cesarean Rates in Industrialized Countries\* with 100,000+ Births, 2003-2007



# Total cesarean rates by race/ethnicity, U.S. 1989-2007

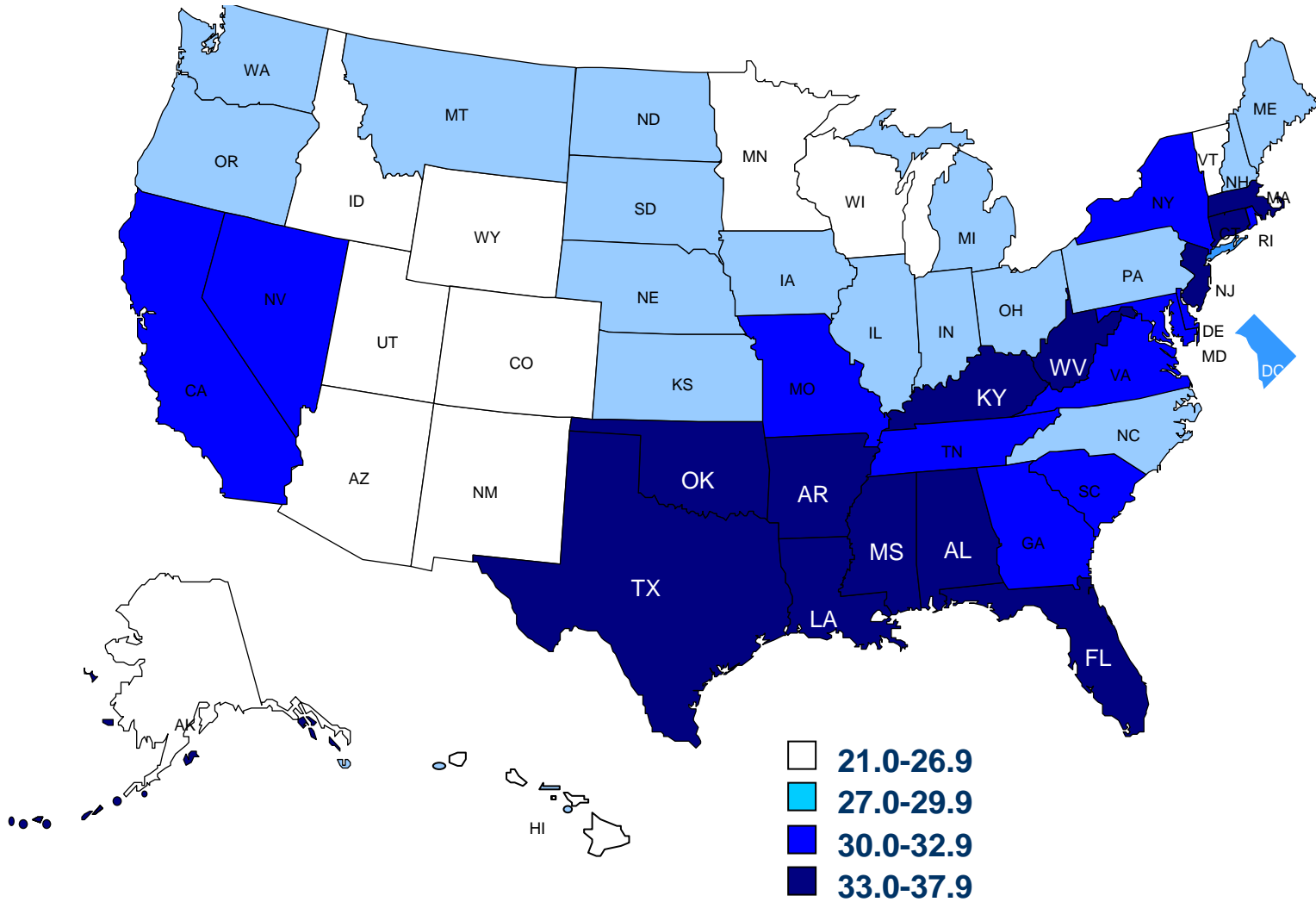
*Is the rising rate about suburban white businesswomen?*



Source: National Center for Health Statistics Annual Birth Reports

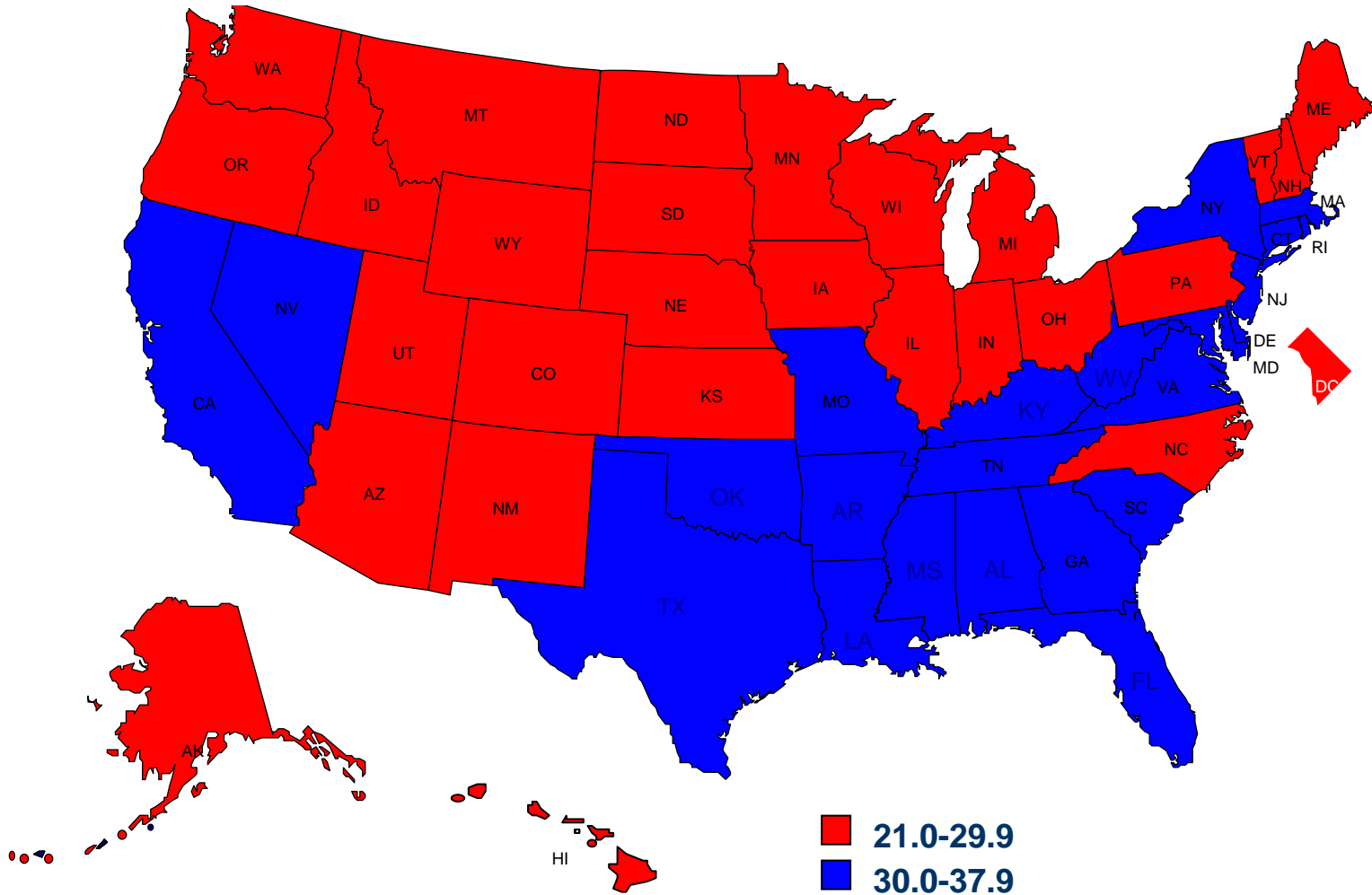


# Total Cesarean Delivery Rates by State, United States: 2006 (preliminary)



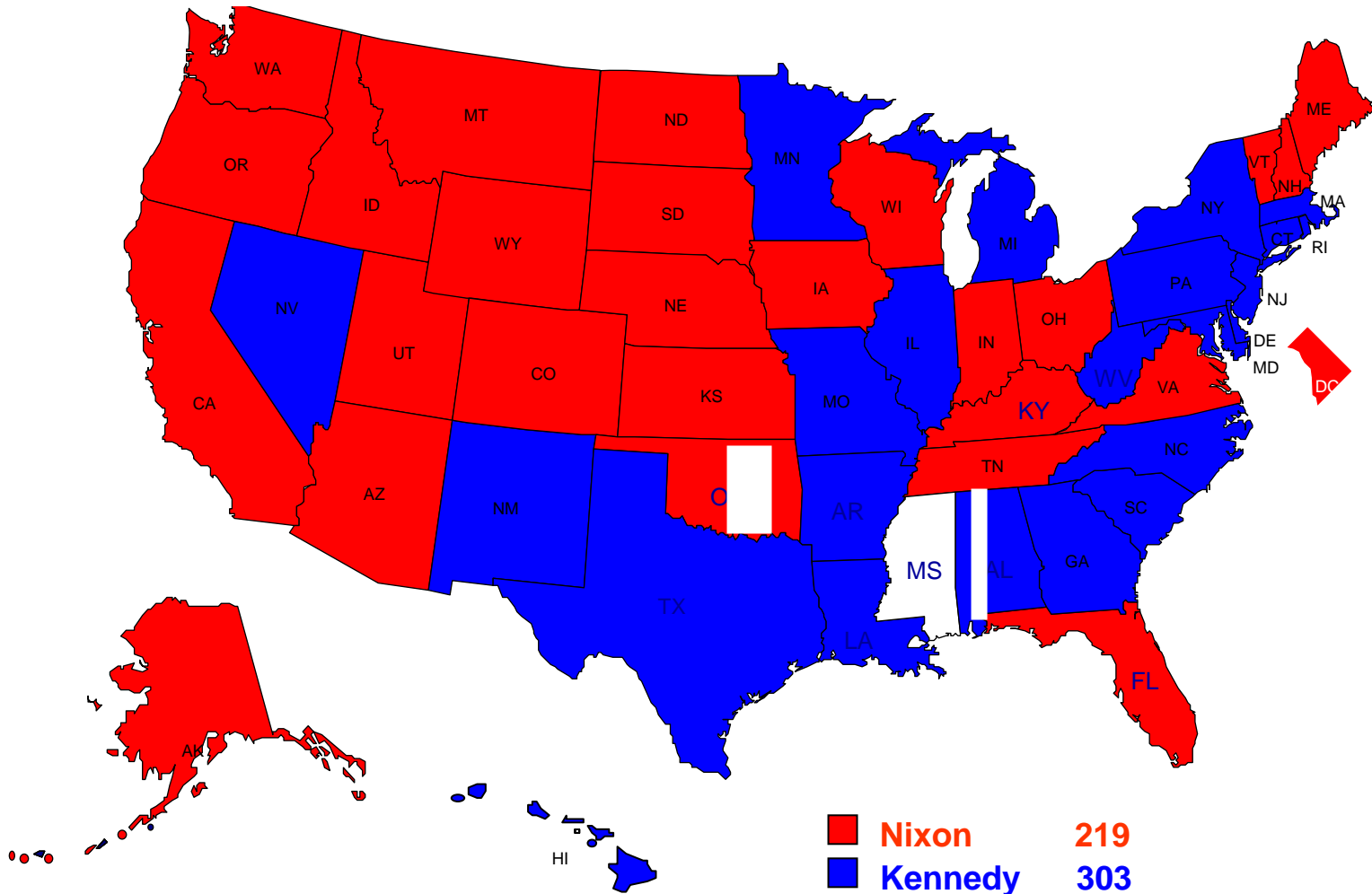
Source: Hamilton B, et al. *Births Preliminary Data 2006*. National Vital Statistics System, 2007.

# Total Cesarean Delivery Rates<sup>1</sup> by State, United States: 2006



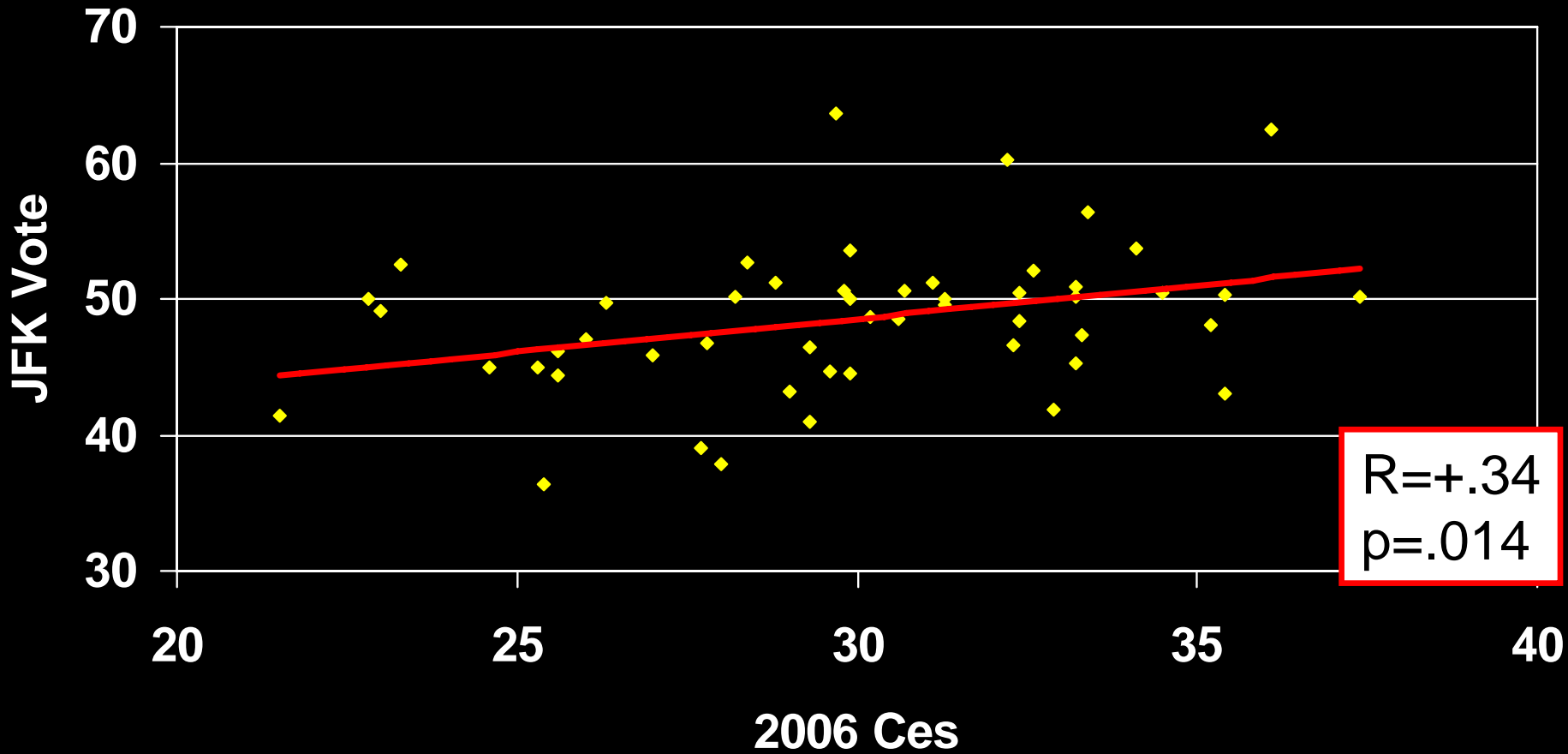
Source: Hamilton B, et al. *Births Preliminary Data 2006*. National Vital Statistics System, 2007.

# 1960 Electoral College Map



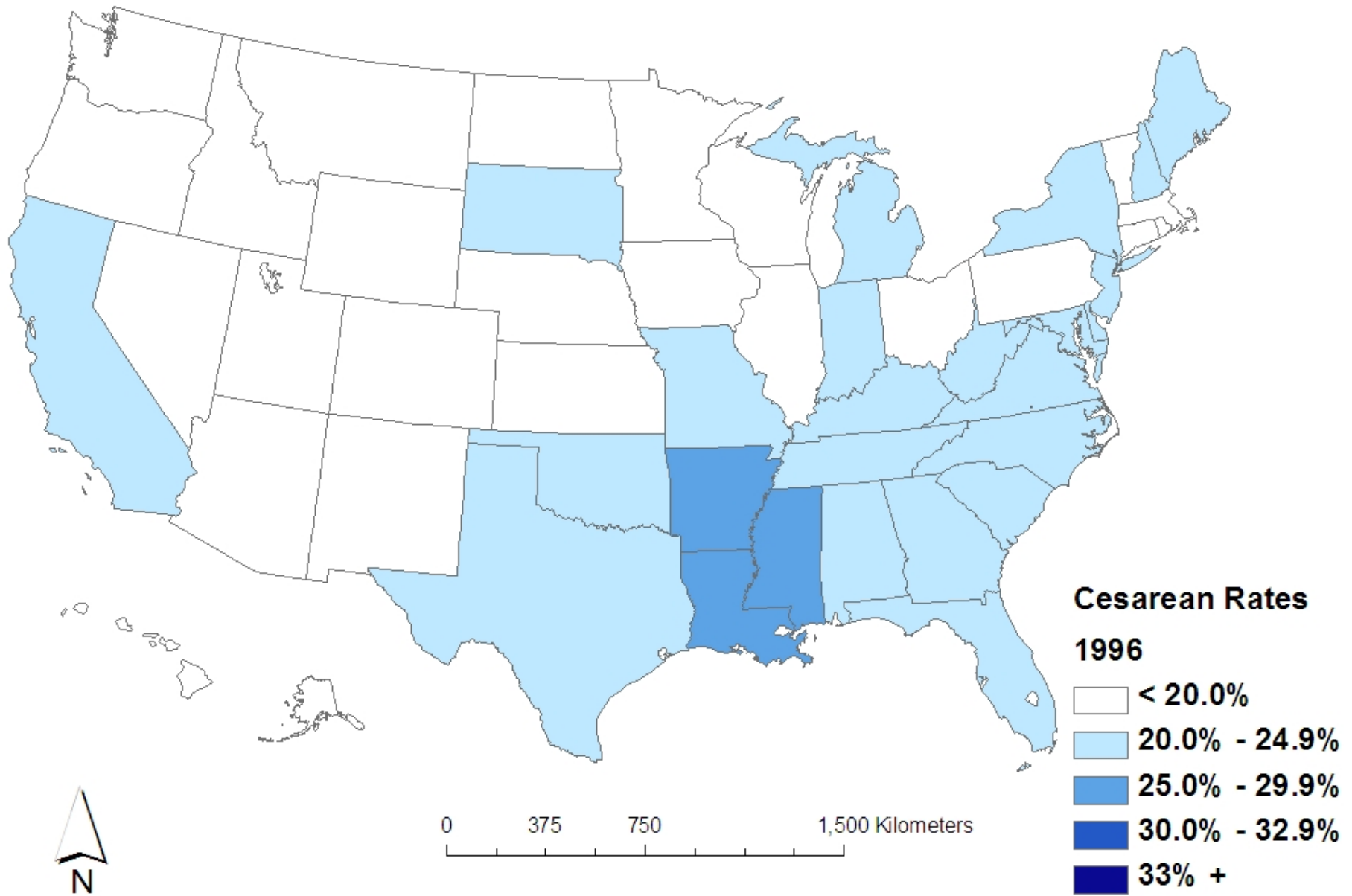
39 states in same category

# 2006 state cesarean rates and vote for JFK in 1960



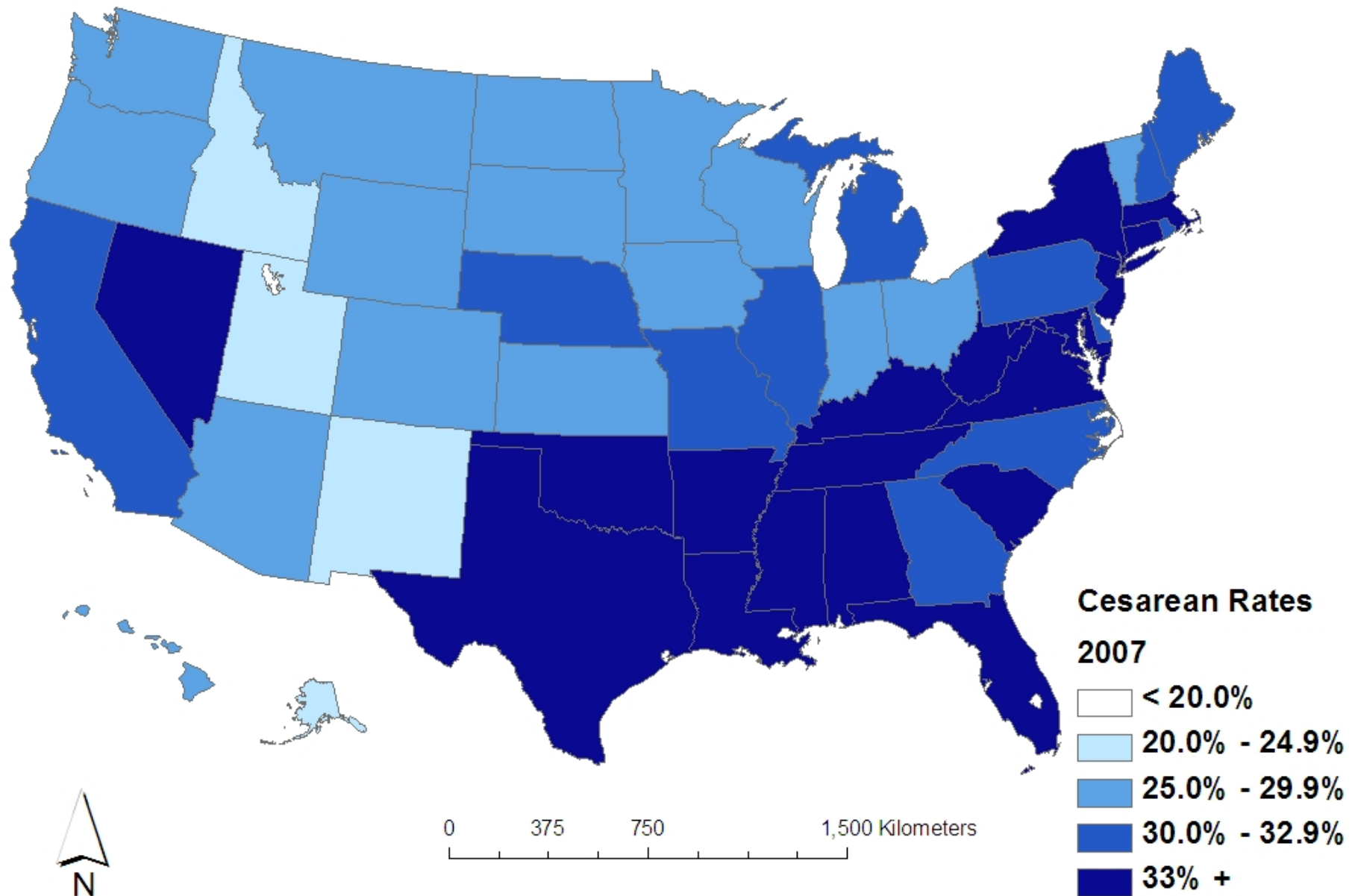
1996

# Overall Cesarean Rates by State from 1990-2007



2007

# Overall Cesarean Rates by State from 1990-2007



# Criteria for Assessing Public Health Problems

- **Severity of Outcomes – US comparatively weak**
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***Public Attitudes:  
Are U.S. Women the  
Reason for the  
Increasing Cesarean  
Rate?***



# Media attention on caesarean delivery with emphasis on “maternal request”

- “Choosy Mothers Choose Caesareans”  
*Time Magazine 4/17/08*
- “‘Too posh to push’ theory backed by caesarean study” *Times of London. 7/3/05*
- “More women turn to cesarean section”  
*Philadelphia Inquirer 3/20/05*
- “Too Posh to Push? Cesarean sections have spiked dramatically” *US News and World Report 8/5/02*

Have maternal  
request cesareans  
played a major role in  
these increases?

A photograph of four diverse women smiling and holding a baby. The image is faded and serves as a background for the text.

***Asking Mothers about  
Maternal Request Cesareans***

Listening to

<http://www.childbirthconnection.org>

Mothers

Eugene R. Declercq

Carol Sakala

Maureen P. Corry

Sandra Applebaum

# Two Components to Maternal Request Primary Cesarean

1. Mother made request for planned cesarean before labor

# Two Components to Maternal Request Primary Cesarean

1. Mother made request for planned cesarean before labor
2. Cesarean for no medical reason

# Patient Choice Primary Cesareans

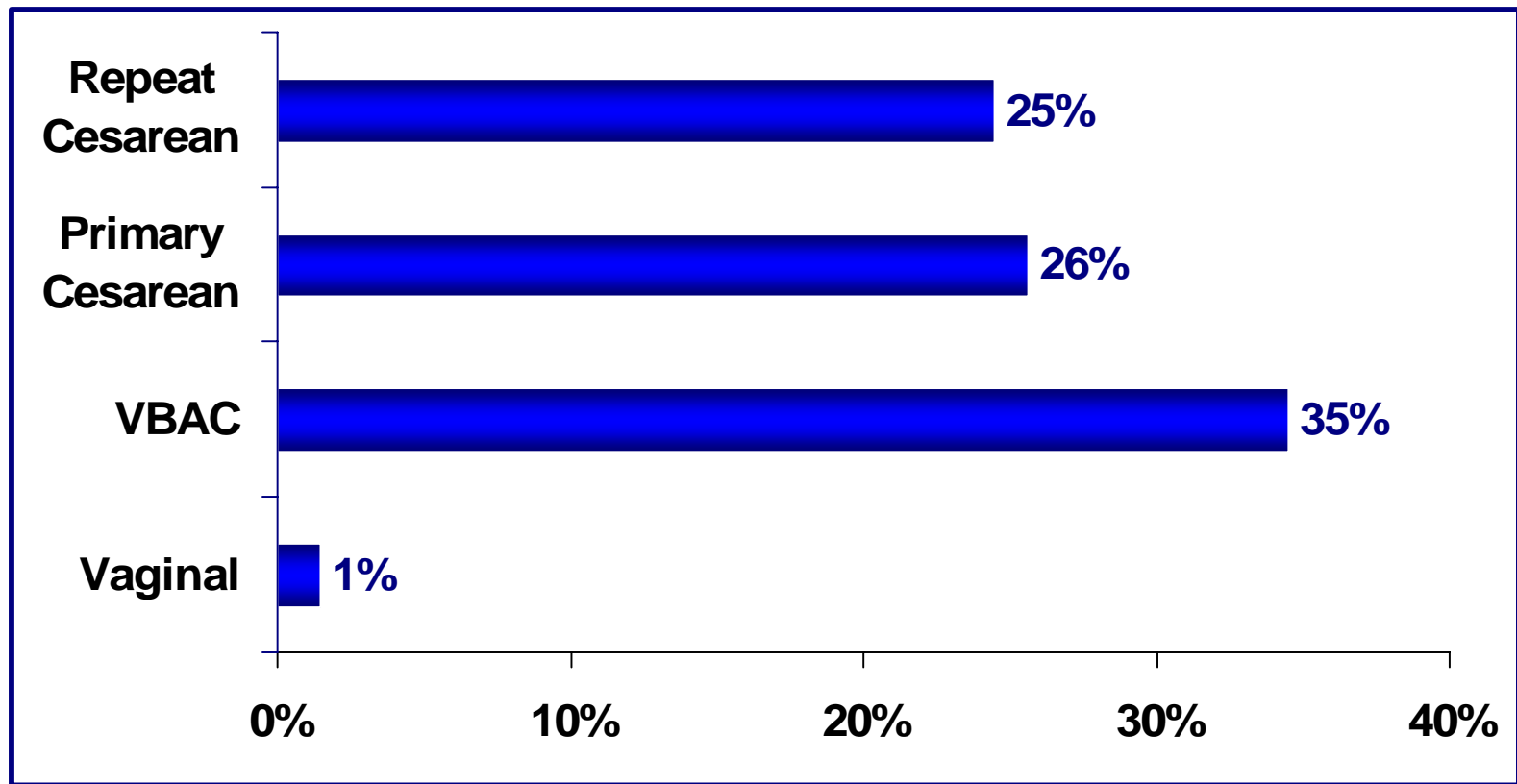
- Combining reason for cesarean and timing of decision found only 1 respondent of 252 (0.4%) had a planned primary cesarean for no medical reason.

*"I think that [cesarean] is... the best way ... to give birth. It is a planned way, no hassle, no pain, the baby doesn't struggle to come out, the baby is not pressed to come out ...I think that ... everybody should have the baby by cesarean section."*

**Studies from England, Canada & Mass. confirm very low rates of maternal request primary cesareans**

# Pressure to Accept Interventions by Method of Delivery

*Did you feel pressure from any health professional to have a cesarean? % yes*



Source: Declercq et al. 2006. *Listening to Mothers II*.

# Criteria for Assessing Public Health Problems

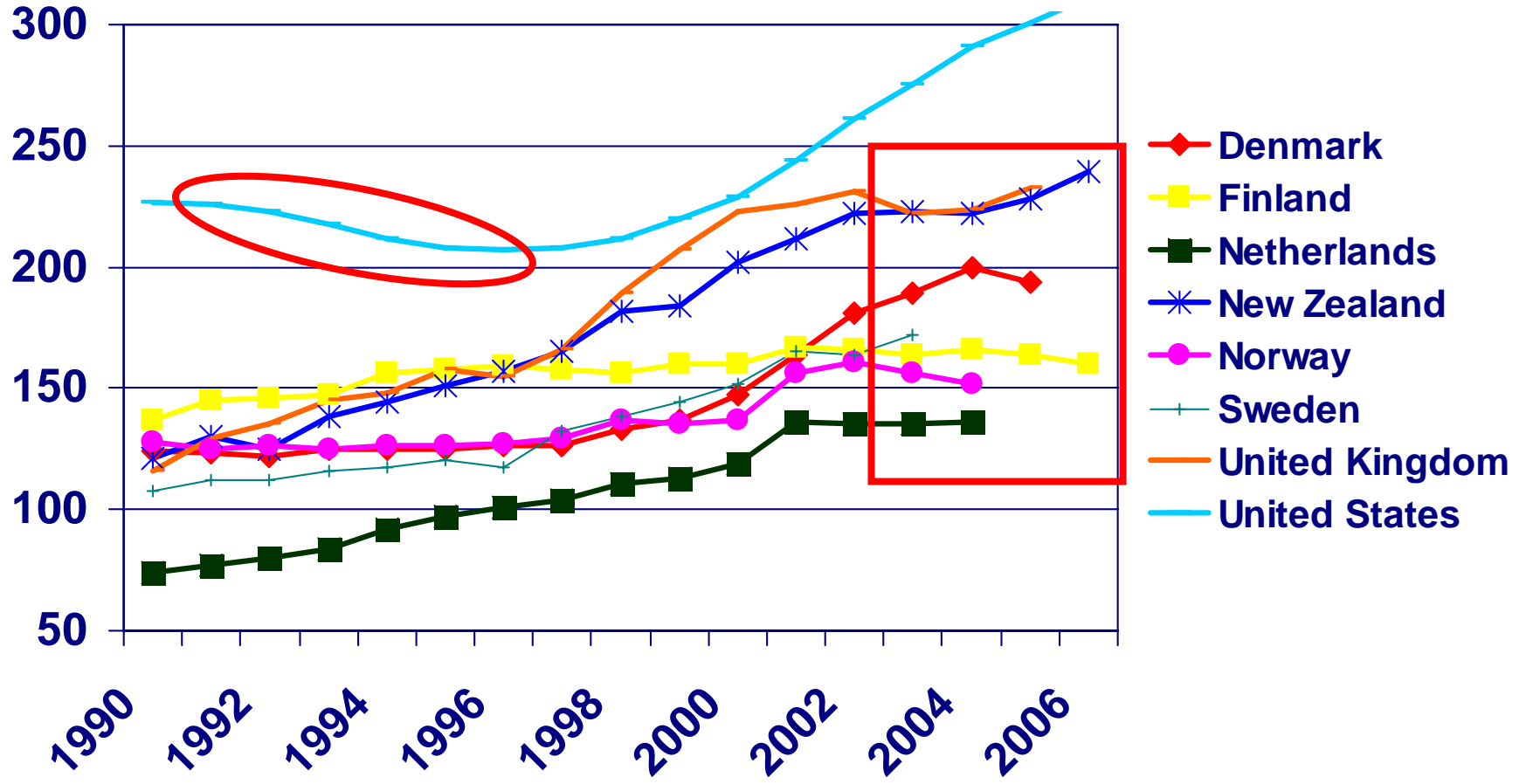
- **Severity of Outcomes – a problem**
- **Prevalence & Trends – a problem**
- **Costs – rising rapidly**
- **Public Attitudes – changes only partly driven by public attitudes**
- **Changeability**



# Changeability

*Is a rising cesarean rate  
inevitable?*

*NO!*



# Criteria for Assessing Public Health Problems

- **Severity of Outcomes – a problem**
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- **Changeability – change is possible but lower rates of intervention a major challenge**

# THE FUTURE: Changing Context for Birth

- Changes in media coverage
- New Midwifery & Childbirth activism

# Impact of TV shows dedicated to birth on first-time mothers

<i>What impact did the program have on you as a pregnant woman?</i>	<i>%</i>
<i>Helped me understand what it would be like to give birth</i>	72
Helped me feel excited about upcoming birth	59
Helped me learn about medical words and technology	48
<i>Helped me clarify my preferences for birth</i>	38
<i>Caused me to worry about my upcoming birth</i>	32

# New Activism

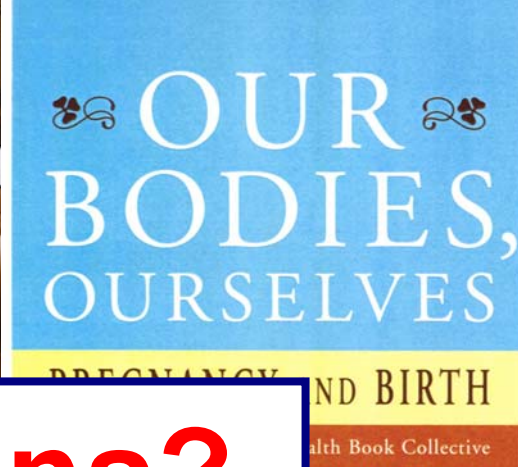
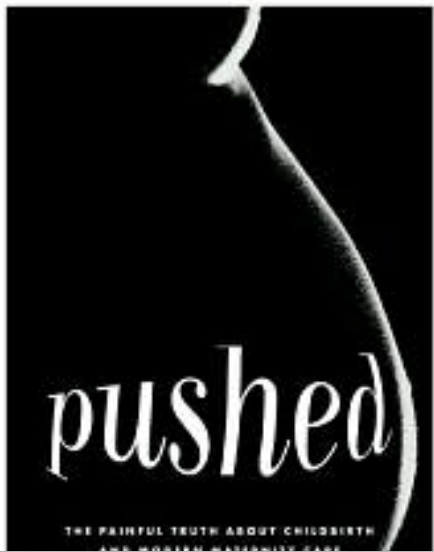
THE HUFFINGTON POST

THE INTERNET NEWSPAPER: NEWS BLOGS VIDEO COMMUNITY

## **“ACOG Up to Dirty Tricks”**

**Louise Marie Roth 9/1/09**

- ACOG “Survey” looking for stories of bad outcomes of home births
- Response -- “Tell ACOG your birth story!”
- ACOG Response – Password the site so only ACOG Members could respond



**Questions?  
Comments?**

**Orgasmic  
Birth**



**BORN IN THE USA**  
HOW A BROKEN MATERNITY SYSTEM MUST BE  
FIXED TO PUT WOMEN AND CHILDREN FIRST



**IT'S MY BODY  
MY BABY  
MY BIRTH**

