



Birth By the Numbers 2017

Is there a problem in the U.S.?

Gene Declercq, PhD

www.birthbythenumbers.org

With support from:

The Transforming Birth Fund

Updated as of February, 2017



3,977,745

11,442

38,542

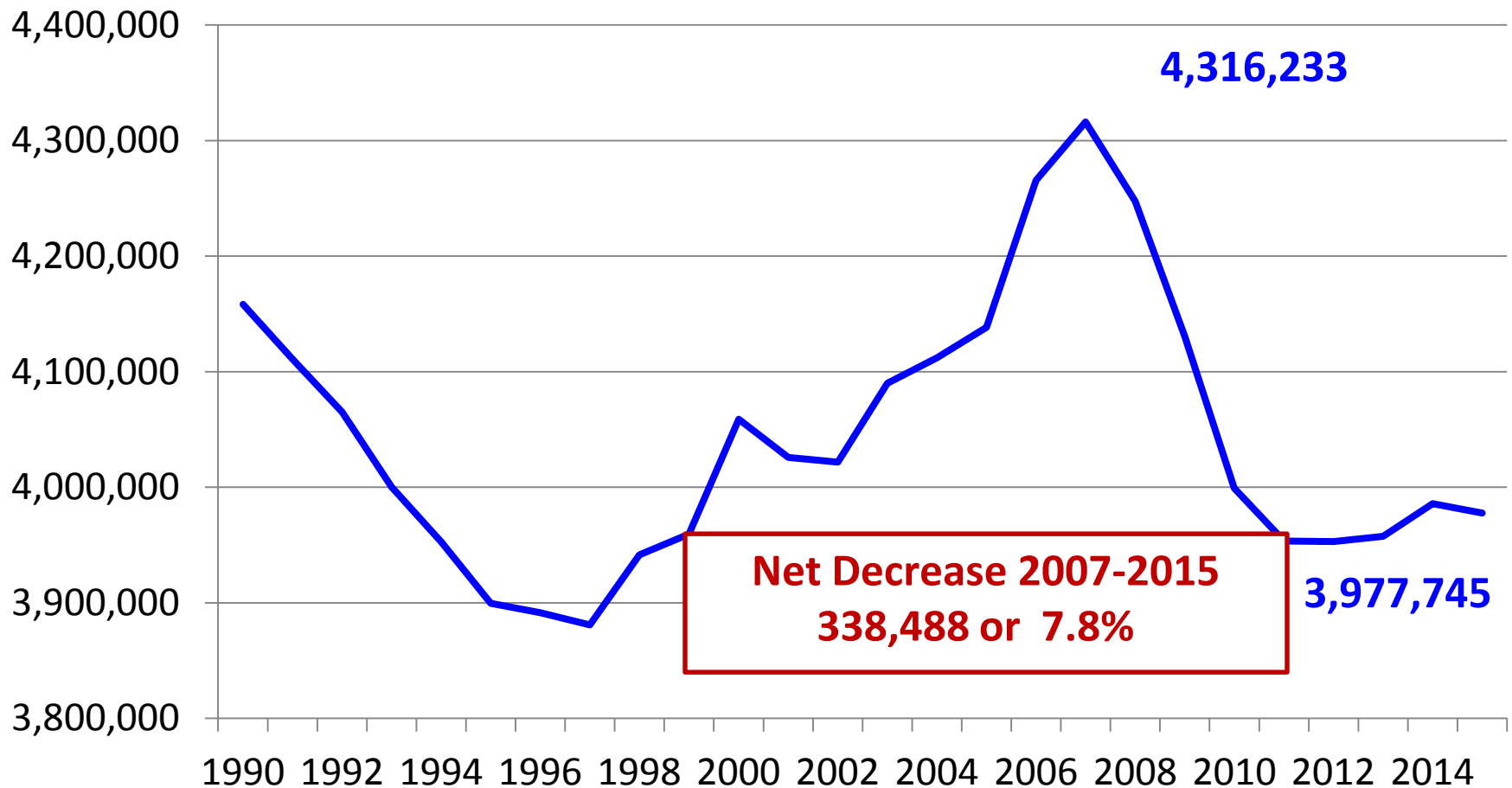
1,272,503

9.2%

\$18,570

\$62,689,000,000

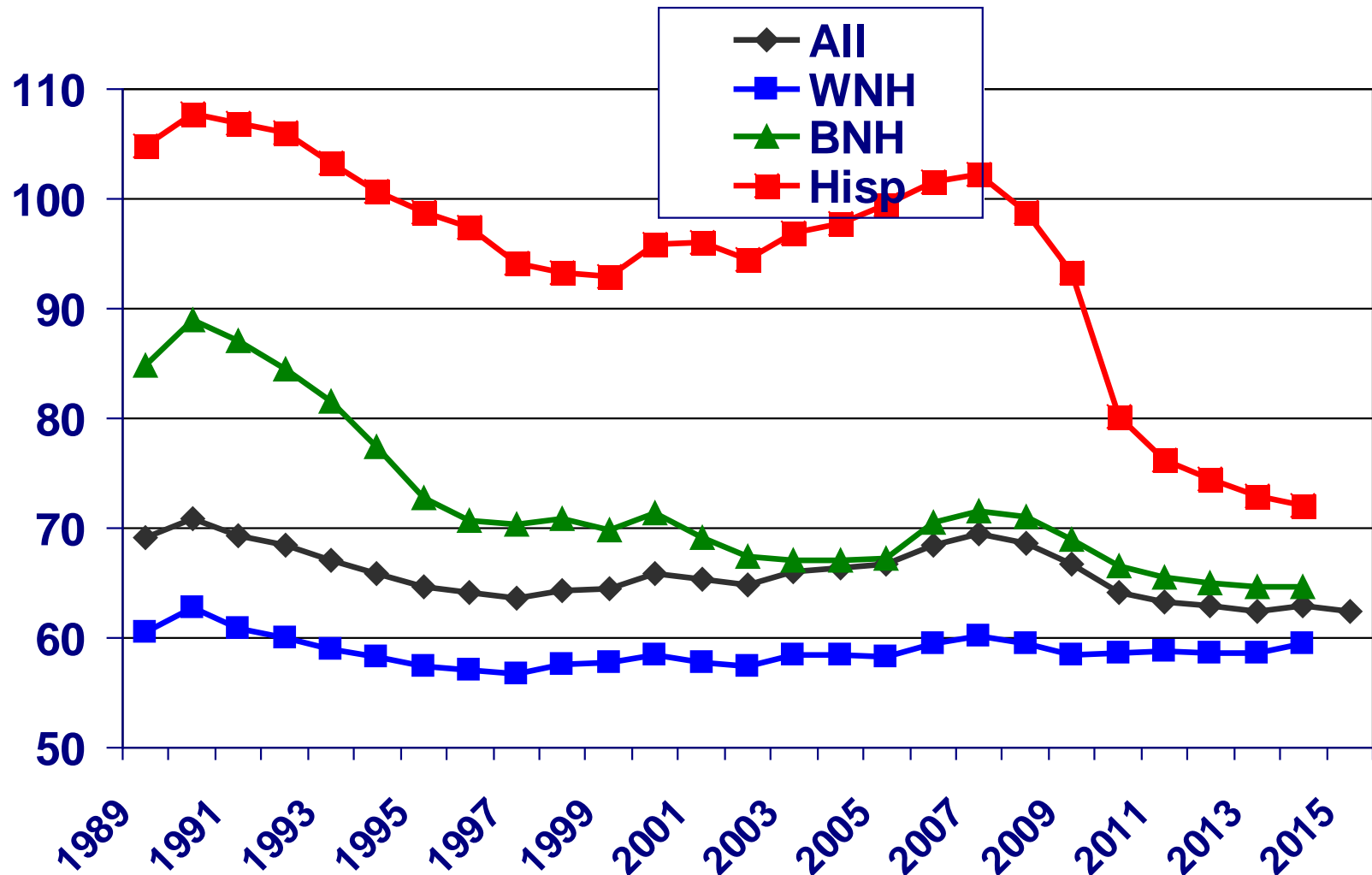
Total U.S. Births, 1990-2015



Source: Adapted from CDC VitalSTATS. <http://www.cdc.gov/nchs/VitalStats.htm>

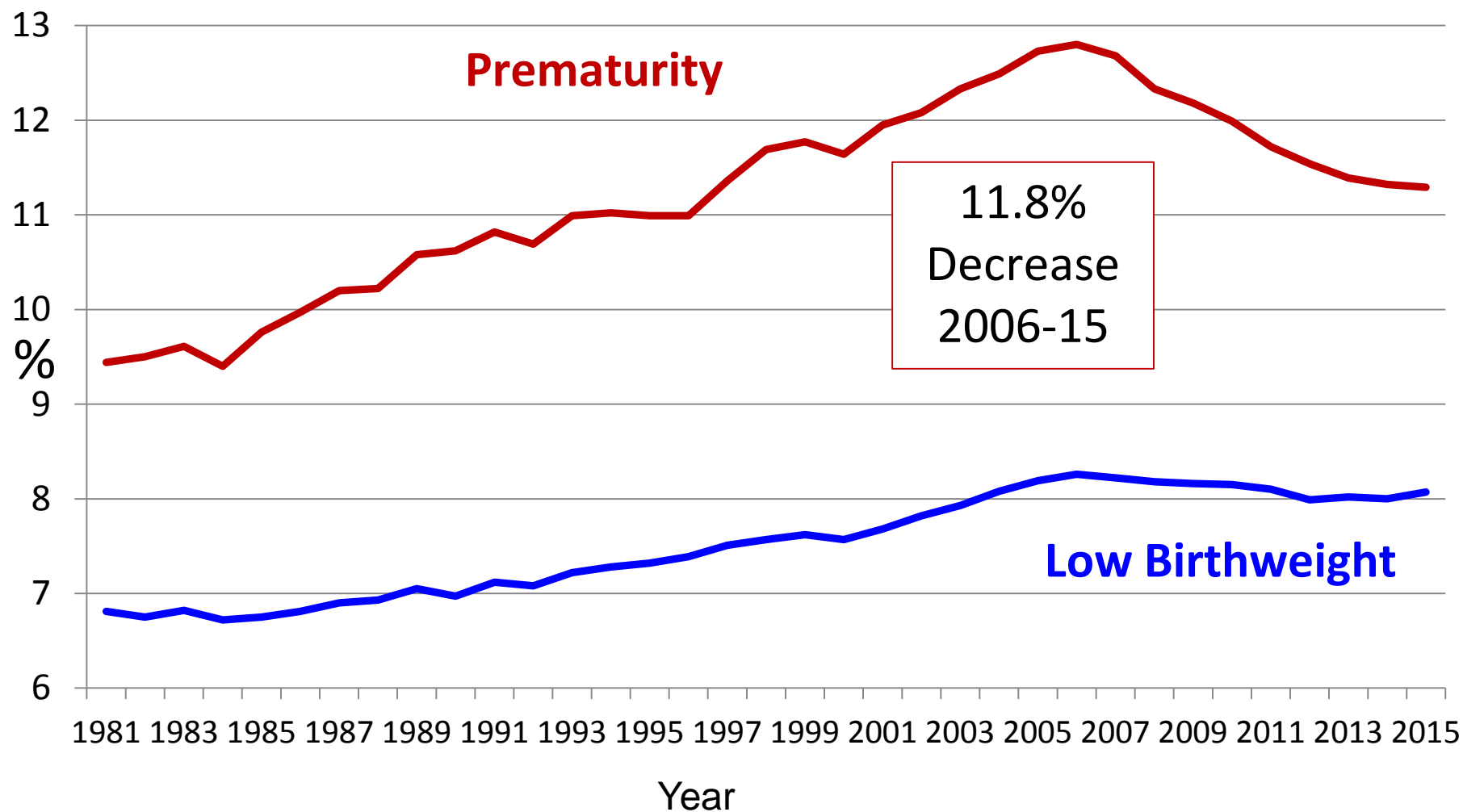
BirthByTheNumbers.org

U.S. Fertility Rates (per 1,000) by Race/Ethnicity, 1989-2015

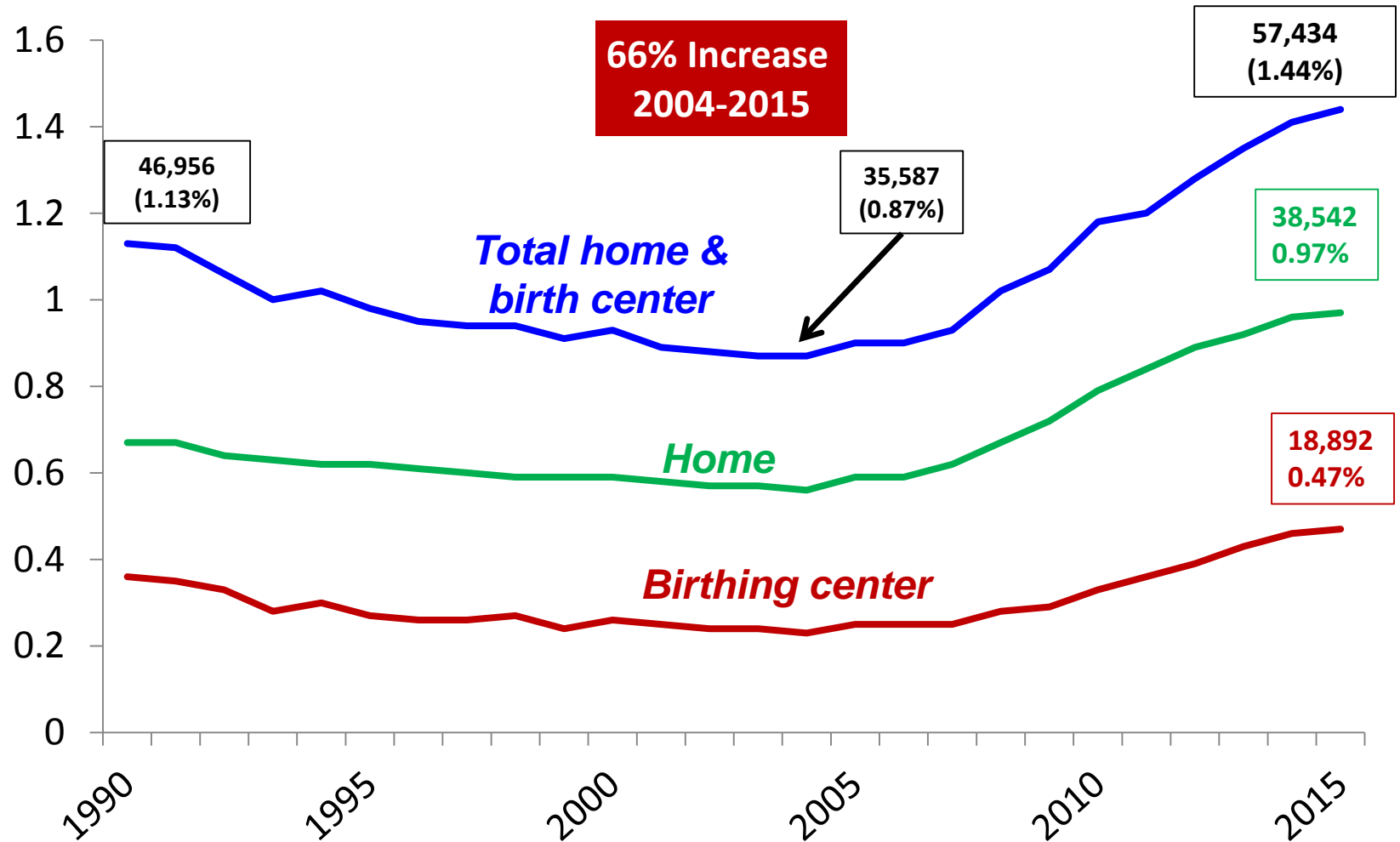


Fertility rates computed by relating total births, regardless of age of mother, to women 15-44 years.

Prematurity and Low Birthweight, U.S., 1981-2015



Percent of all births at home, or in a birthing center, United States, 1990-2015



Source: NCHS Annual Birth Reports & CDCVitalStats. <http://www.cdc.gov/nchs/nvss.htm>



*Is the U.S. really doing as
badly as it seems in
international
comparisons?*



Is the U.S. really doing that badly?

How Do we Compare Outcomes?

Neonatal Mortality Rate

***Infant Deaths in
First 28 days
X 1,000***

***Live
Births***

Outcomes: Comparative Neonatal Mortality Rates

Rank	Country	Rank	Country	Rank	Country
1	Andorra (1/1,000)	14	Czech Republic	27	Sweden
	Finland		Denmark		Canada (3/1,000)
	Iceland		Estonia		Croatia
	Japan		France		Cuba
	Luxembourg		Germany		Greece
	San Marino		Ireland		Lithuania
	Singapore		Israel		Netherlands
8	Australia (2/1,000)		Italy		New Zealand
	Austria		Monaco		Poland
	Bahrain		Norway		Spain
	Belarus		Portugal		Switzerland
	Belgium		Repub. of Korea		United Kingdom
13	Cyprus	26	Slovenia	39	United States (4/1,000)



Outcomes: Comparative 2015 Neonatal Mortality Rates

Rank	Country	Rank	Country	Rank	Country
1	Andorra (1)	14	Cyprus	29	United Kingdom
	Bahrain		Czech Republic		Canada (3)
	Finland		Estonia		Croatia
	Iceland		France		Denmark
	Japan		Germany		Greece
	Luxembourg		Ireland		Kuwait
	San Marino		Israel		Lithuania
	Singapore		Italy		Montenegro
9	Slovenia		Monaco		New Zealand
	Australia (2)		Netherlands		Poland
	Austria		Norway		Spain
	Belarus		Portugal		Switzerland
	Belgium		Republic of Korea	41	United States (4)
14	Cuba	28	Sweden		



Outcomes

Total Births in the five countries in red background in 2015 were 11,442 or comparable to the 11,311 in North Dakota in 2015

Country	2014-15 Births
Andorra	639
Iceland	4,129
Luxembourg	6,115
San Marino	296
Monaco	263
TOTAL	11,442



What's a Fair Comparison with the US?

In the most recent year available (2015):

- Countries with at least 100,000 births
- Countries with a total per capita annual expenditure on health of at least \$2,000 annually in US dollars.

Defining a Set of Countries to Compare with the U.S.

16 Comparison Countries (SOURCE: OECD, Health Data 2015 & State of World's Children, 2015)	2013 Total Births (000)	2013 Total exp. health – PC, US\$ PPP	2013 % Births by Cesarean
Australia	308	*3,866	*31.2
Belgium	129	4,256	*19.7
Canada	396	#4,429	*26.1
Czech Republic	118	2,040	23.3
France	792	4,124	20.2
Germany	702	#5,002	31.4
Greece	108	2,366	NA
Israel	157	2,428	19.9
Italy	560	#3,126	37.7
Japan	1,062	#3,768	18.0
Korea	472	#2,440	34.6
Netherlands	179	#5,217	*15.6
Spain	488	*2,928	24.9
Sweden	115	4,904	16.2
United Kingdom	770	3,235	24.1
United States	3,954	8,713	32.8

* 2012 #2014



U.S. HEALTH

IN

INTERNATIONAL PERSPECTIVE

Shorter Lives, Poorer Health

Panel on Understanding Cross-National Health Differences
Among High-Income Countries

Steven H. Woolf and Laudan Aron, *Editors*

Committee on Population
Division of Behavioral and Social Sciences and Education

Board on Population Health and Public Health Practice
Institute of Medicine

NATIONAL RESEARCH COUNCIL AND
INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES

IOM chose 16 peer countries. 13 are same as the one's we've used. They use 4 countries (Denmark, Finland, Portugal, Switzerland) that have <100,000 births. We include Belgium, Czech Republic, Greece and Israel

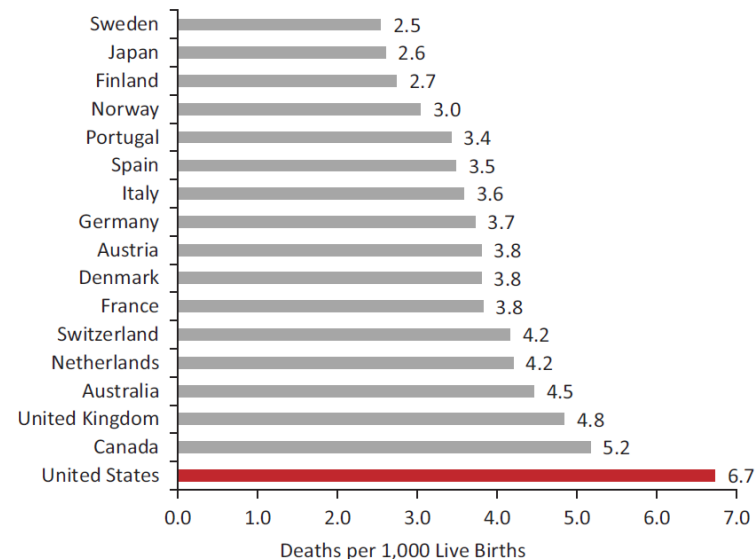


FIGURE 2-1 Infant mortality rates in 17 peer countries, 2005-2009.
NOTE: Rates averaged over 2005-2009.
SOURCE: Data from OECD (2012c).



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

Neonatal Mortality Rate

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

*Live
Births*

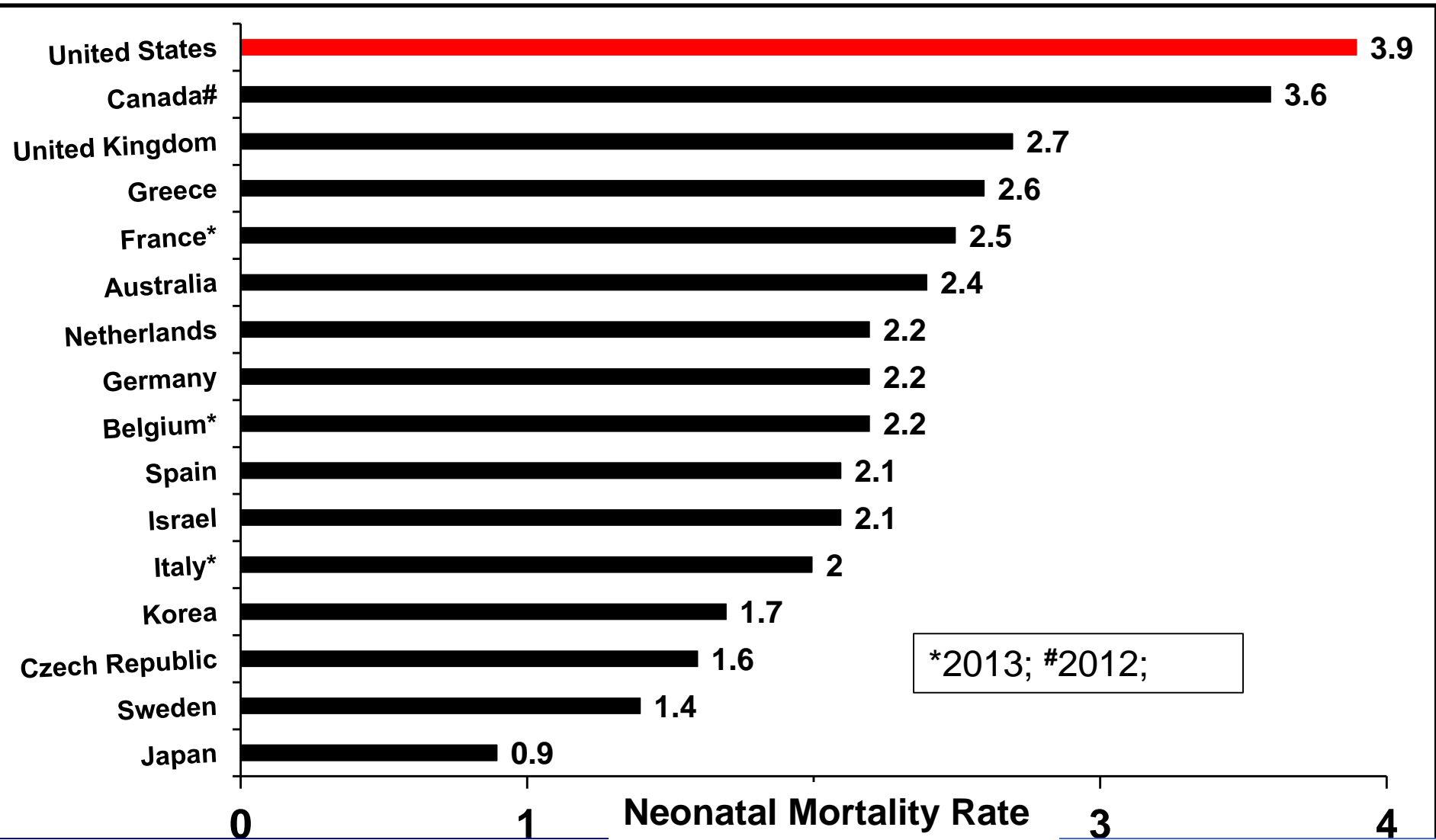
Perinatal Mortality Rate

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

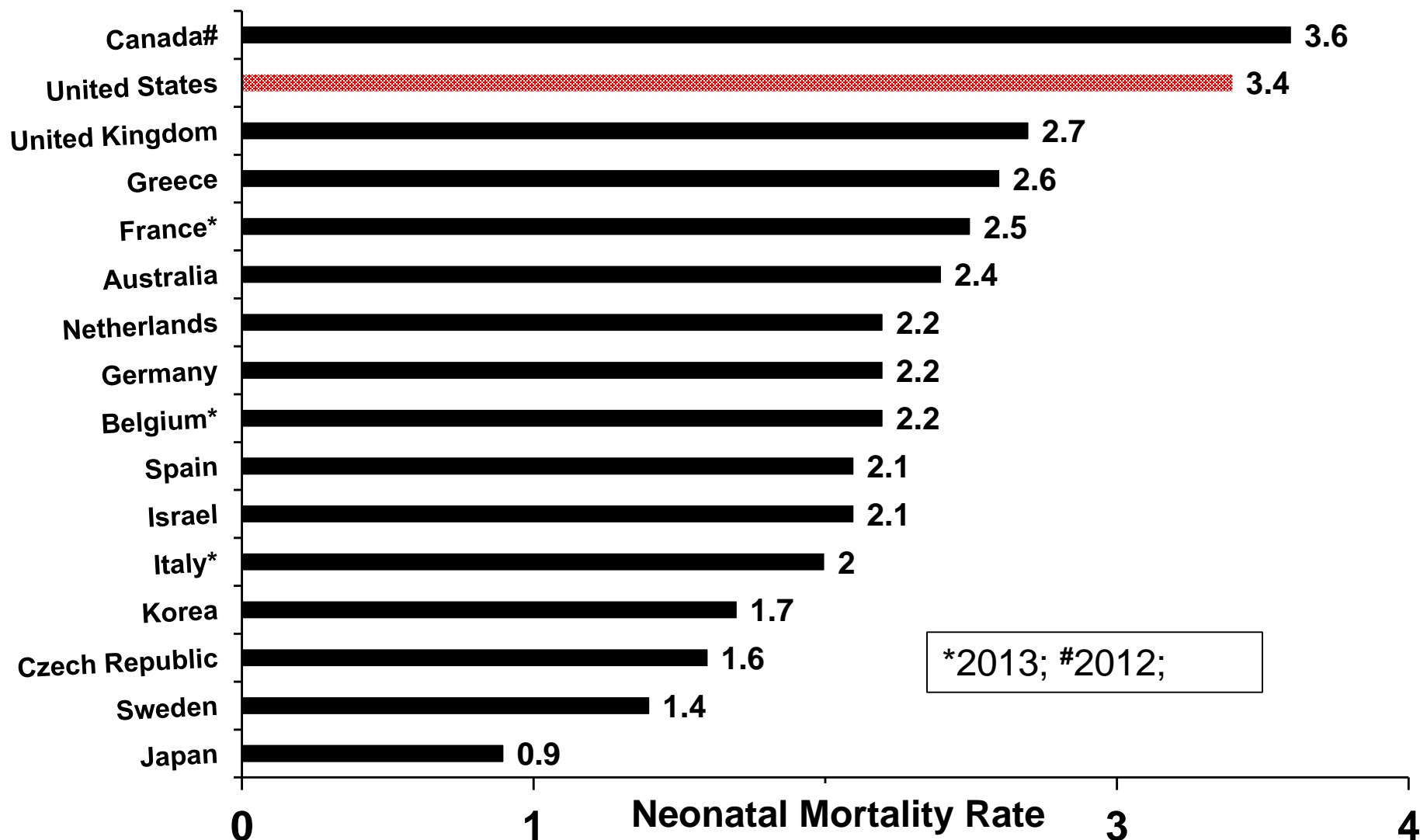
*Live births + fetal
deaths*



Neonatal Mortality Rates (per 1,000 births), 2014, Industrialized Countries with 100,000+ Births

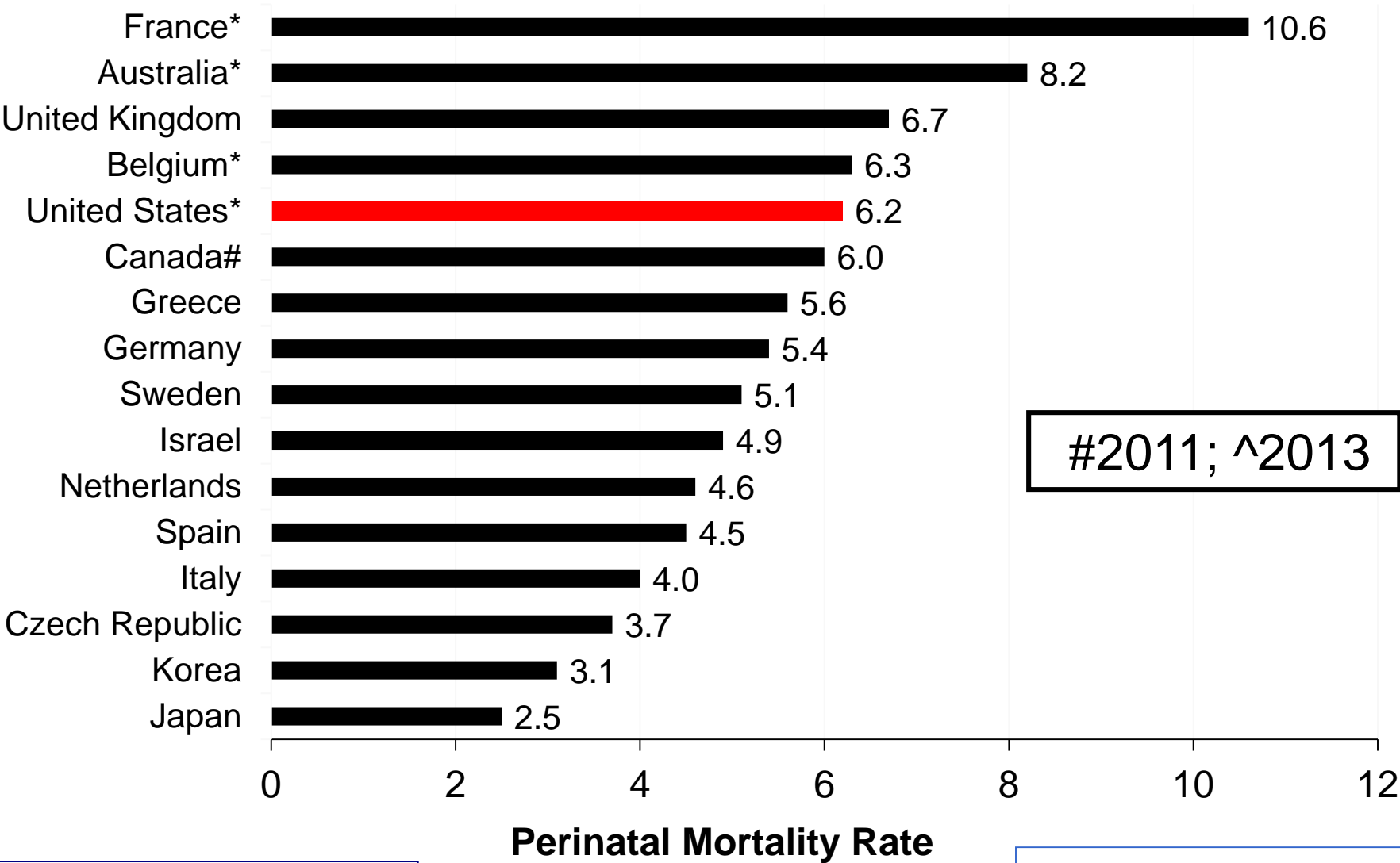


Neonatal Mortality Rates (per 1,000 births), 2014, Industrialized Countries with 100,000+ Births



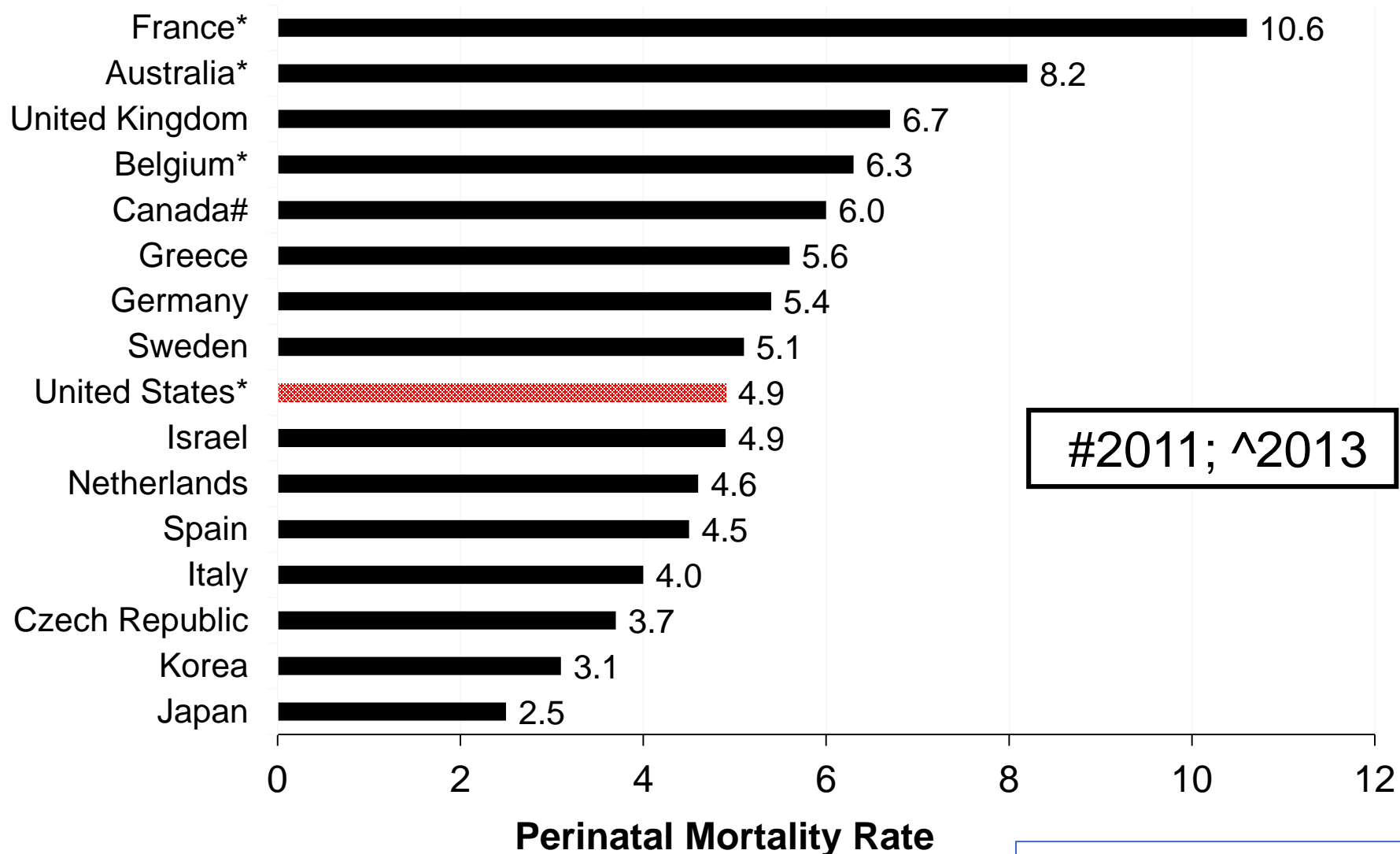


Perinatal Mortality Rates (per 1,000 births), 2014, Industrialized Countries 100,000+ Births





Perinatal Mortality Rates (per 1,000 births), 2014, Industrialized Countries 100,000+ Births





Maternal Mortality Ratios

Maternal Mortality Ratio

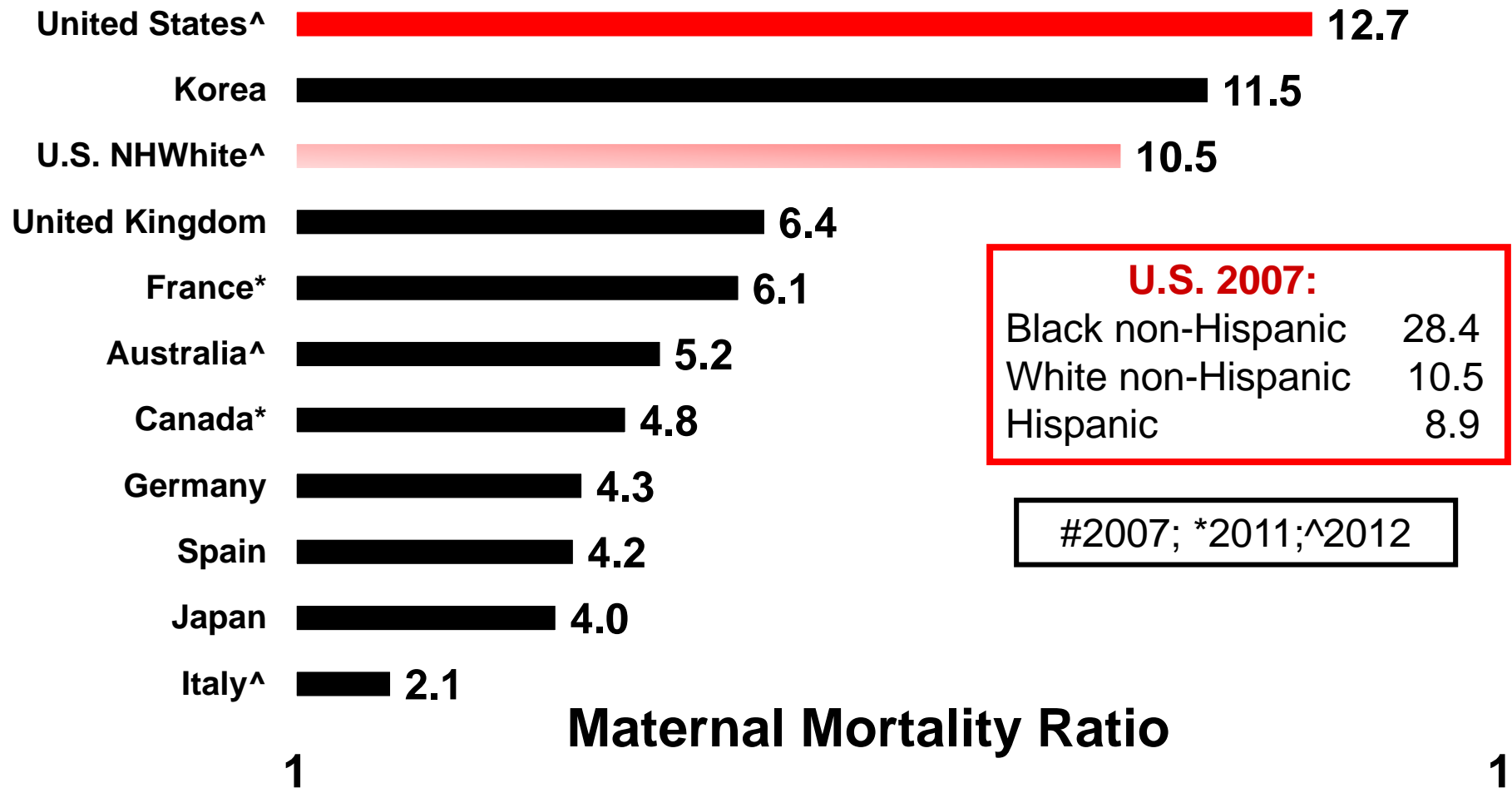
Maternal Deaths all causes*
X 100,000

Live births

** Deaths in pregnancy and up to 42 days postpartum*



Maternal Mortality Rates, (per 100,000 *births*), 2013, Industrialized Countries with 300,000+ births



Sources: OECD Health Data 2016; NCHS. 2009. *Deaths, Final Data, 2007*.



**Are things Getting
Better or Worse?**



Are things Getting Better or Worse?

Yes



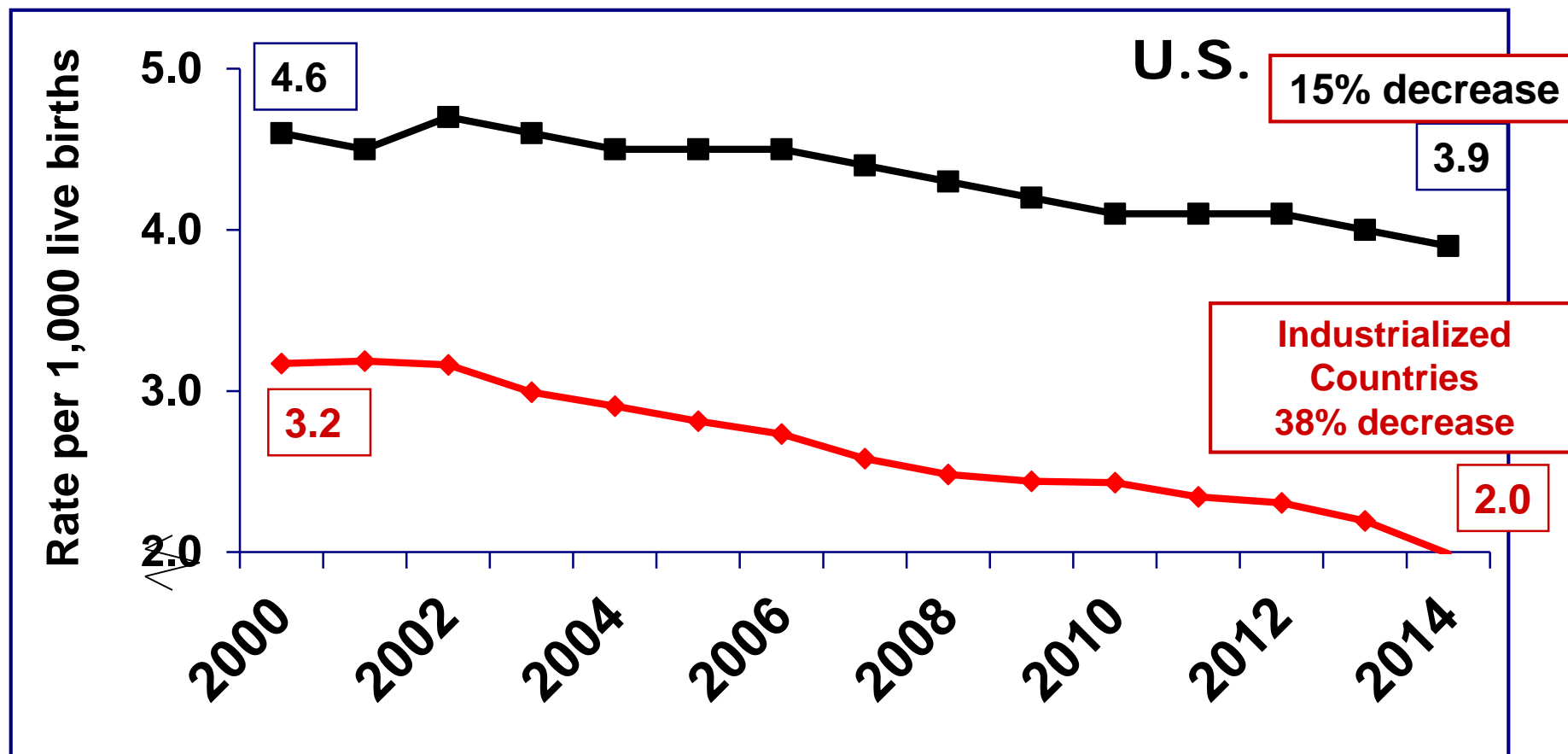
Are things Getting Better or Worse?

Yes

***Things are getting better in
the U.S., but at a slower
pace than comparable
countries***

Examining Trends over Time

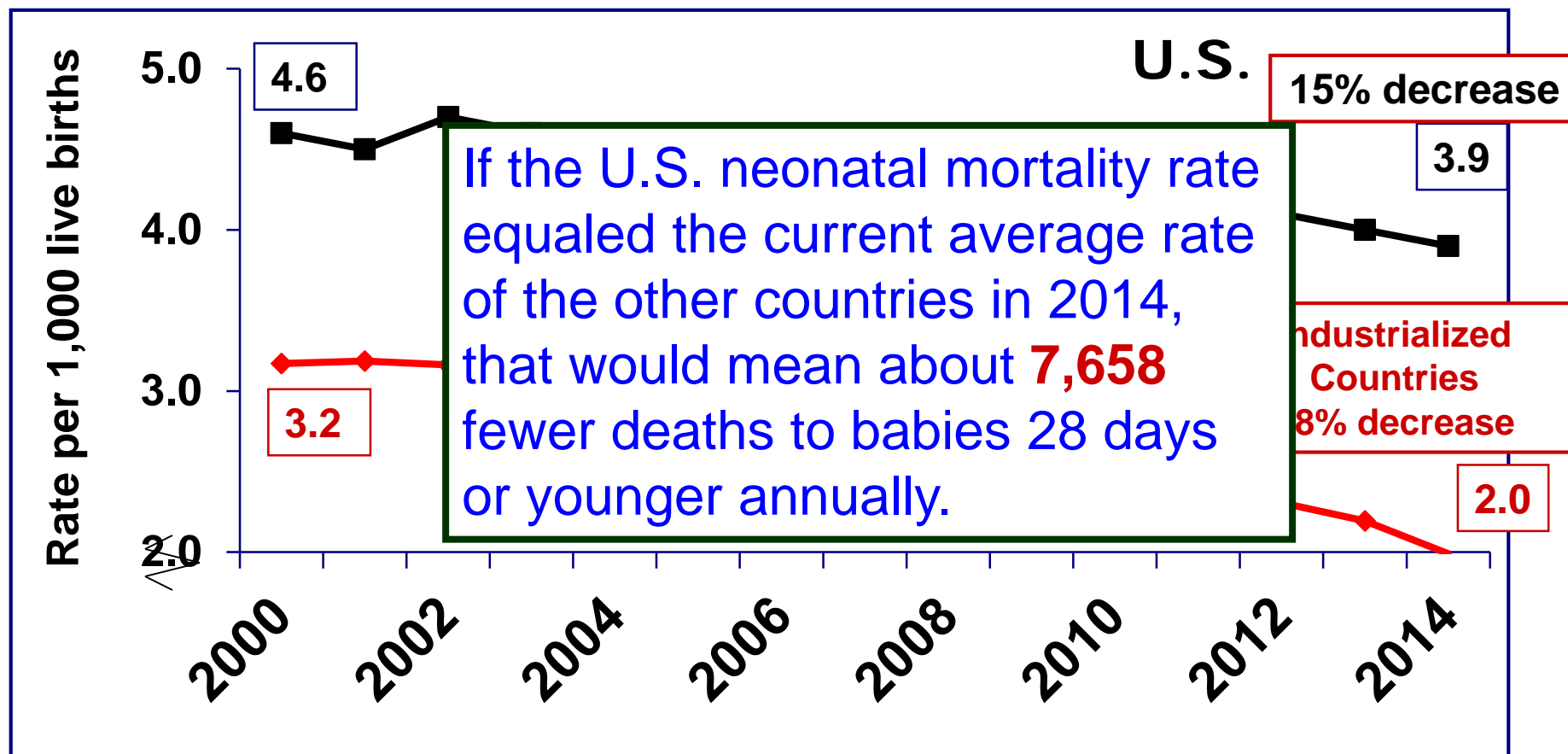
Neonatal Mortality Rate (per 1,000 births), 2000-2014, U.S., & Ave. for Industrialized Countries*



* Countries with 100,000+ births (2012): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Israel, Italy, Japan, Netherlands, Spain, S. Korea, Sweden, U.K.

Source: OECD Health Data, 2014 & MacDorman MF, et al. Recent declines in infant mortality in the United States, 2005–2011. NCHS data brief, no 120. Hyattsville, MD: NCHS. 2013.

Neonatal Mortality Rate (per 1,000 births), 2000-2014, U.S., & Ave. for Industrialized Countries*



* Countries with 100,000+ births (2012): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Israel, Italy, Japan, Netherlands, Spain, S. Korea, Sweden, U.K.

Source: OECD Health Data, 2014 & MacDorman MF, et al. Recent declines in infant mortality in the United States, 2005–2011. NCHS data brief, no 120. Hyattsville, MD: NCHS. 2013.

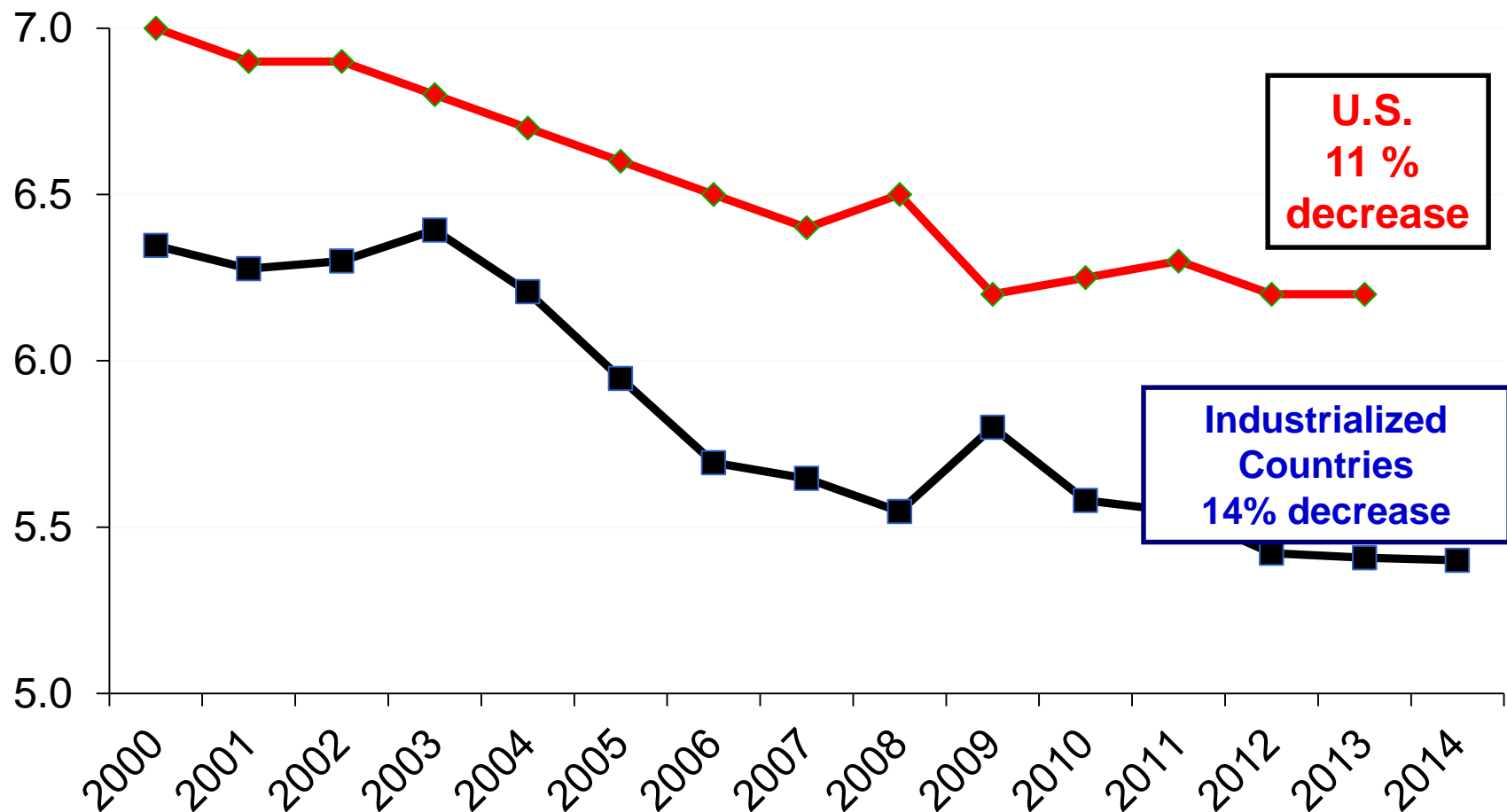
>100,000 fewer neonatal deaths 2000-2014



Capacity – 92,524

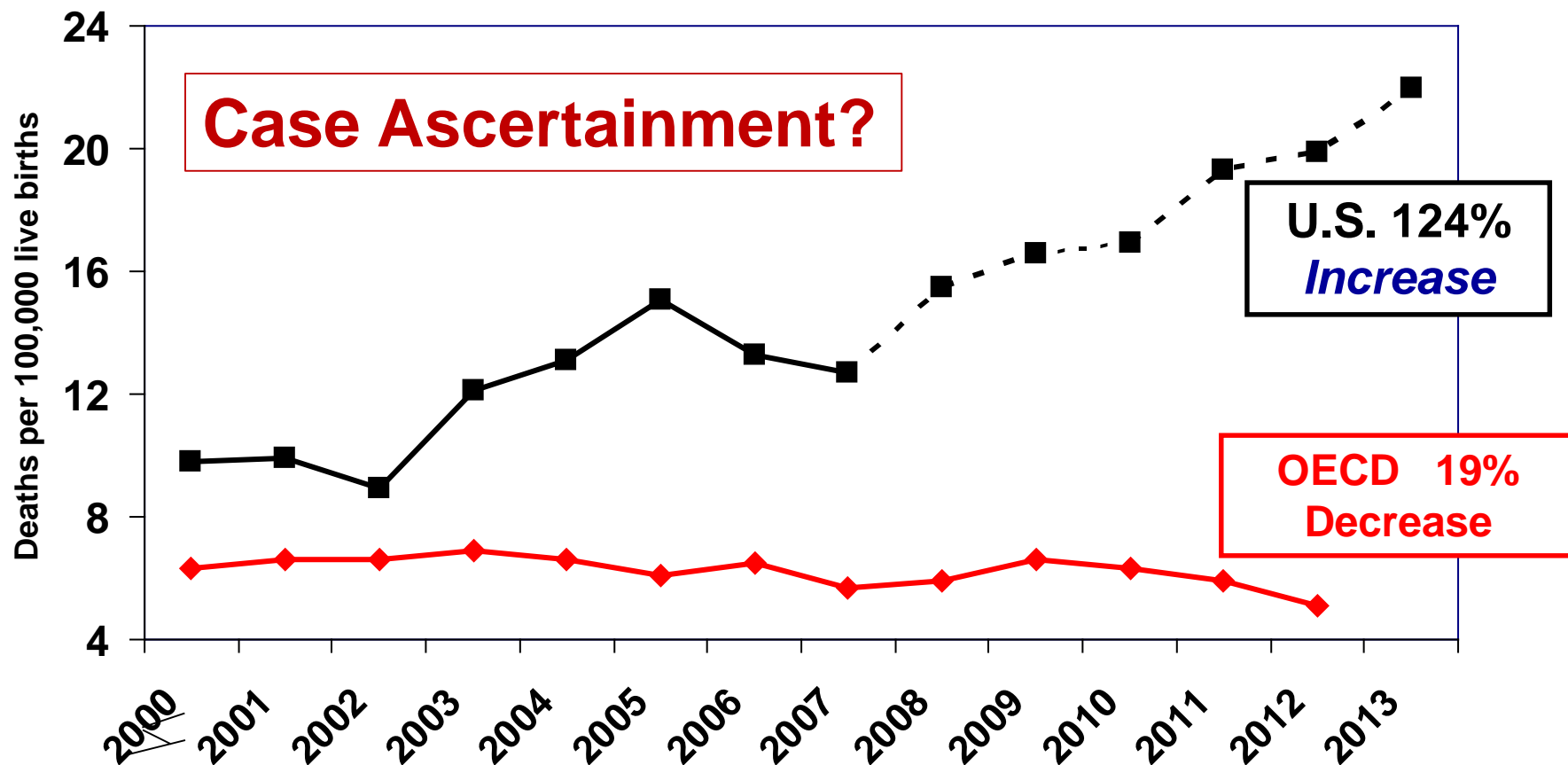


Perinatal Mortality Rates, 2000-2014 , U.S., & Ave. for Industrialized Countries*



* Countries with 100,000+ births (2012): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Israel, Italy, Japan, Netherlands, S. Korea, Spain, Sweden, United Kingdom

Maternal Mortality Ratios (per 100K births), 2000-2013, U.S. & Comparable Countries *



* Countries with 300,000+ births (2012): Australia, Canada, France, Germany, Italy, Japan, S. Korea, Spain, United Kingdom

Sources: OECD Health Data 2015; ^California Maternal Quality Care Collaborative (CMQCC) 2014; NCHS. 2009. *Deaths, Final Data, 2007*.

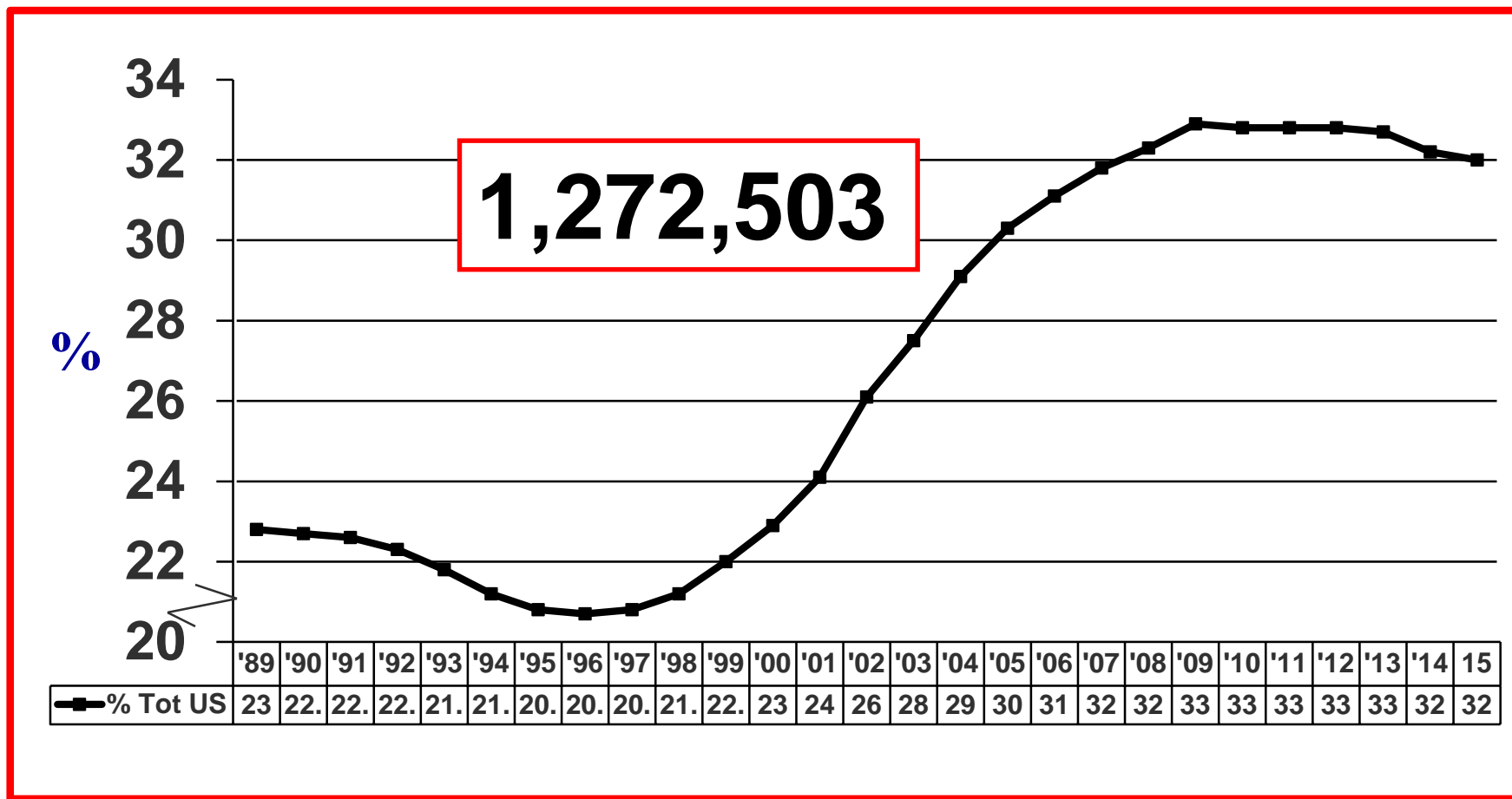
NOTE: 2008-2013 US rates unofficial^



What about process?

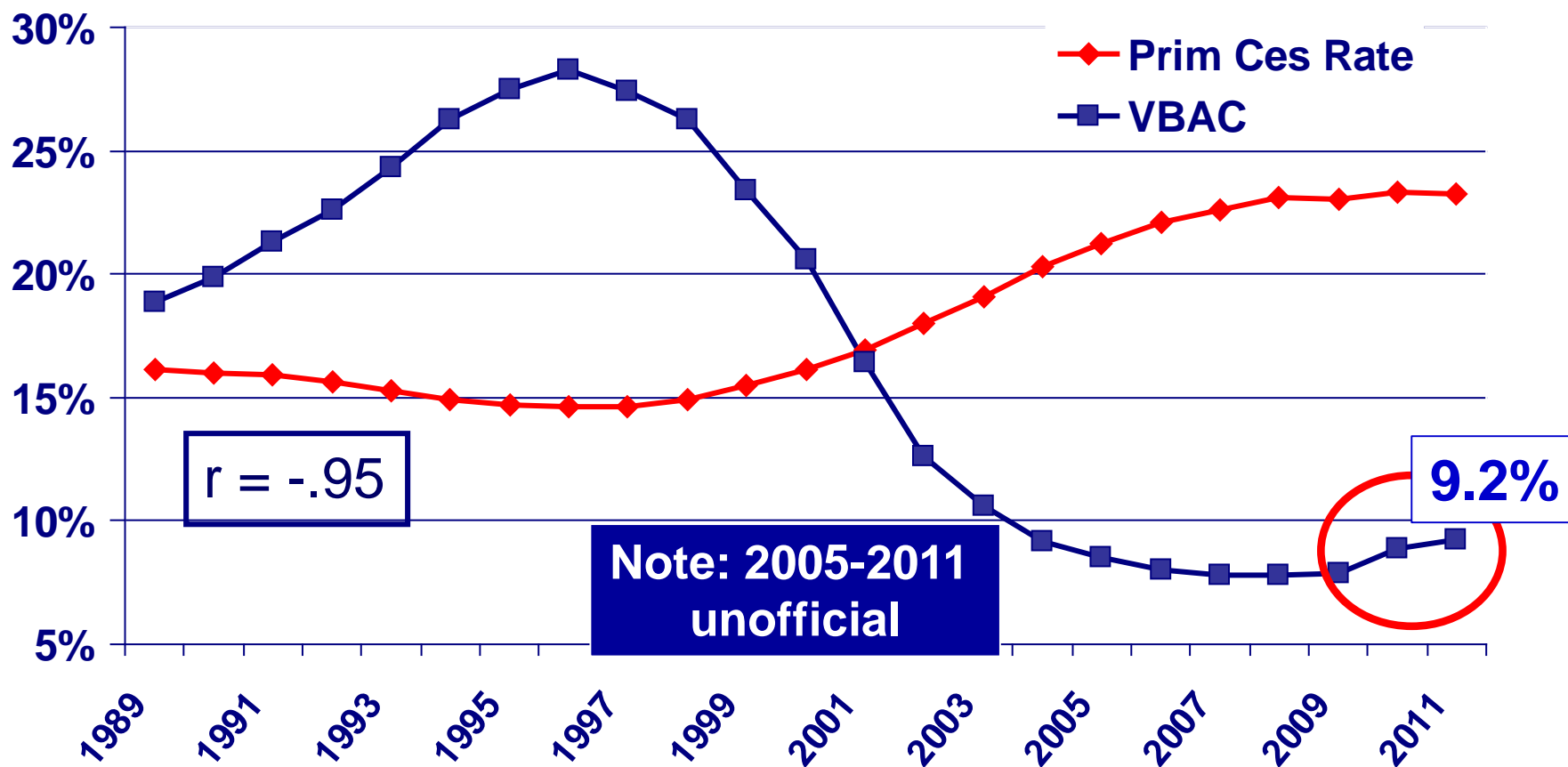


US Cesarean Rates, 1989-2015



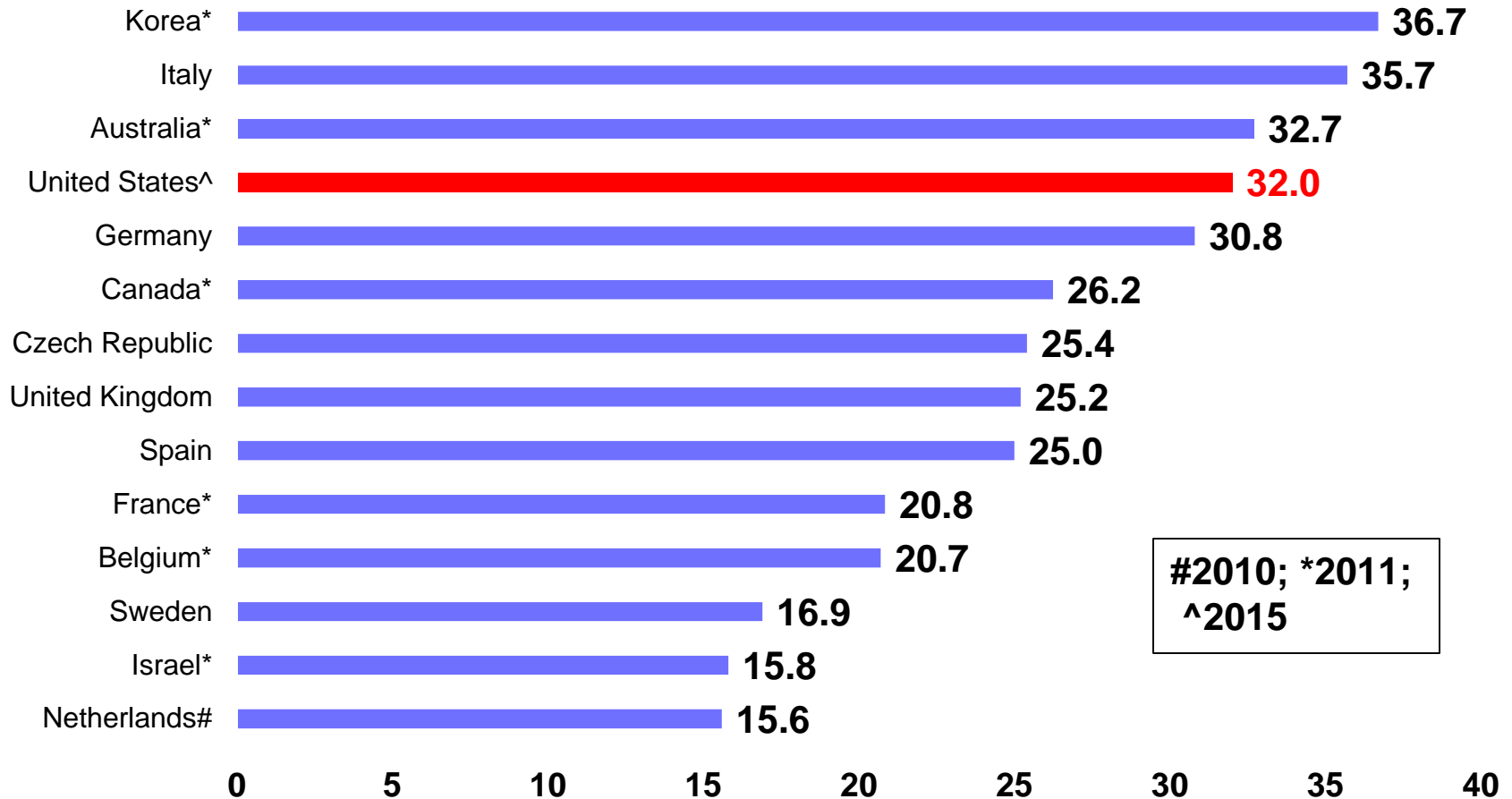
If the 2015 cesarean rate was the same as in 1996, there would have been 449,000 fewer cesareans in the U.S. in '15.

Primary Cesarean and VBAC Rates, U.S., 1989-2011



Source: NCHS. *Annual Birth Reports & Vital Stats*

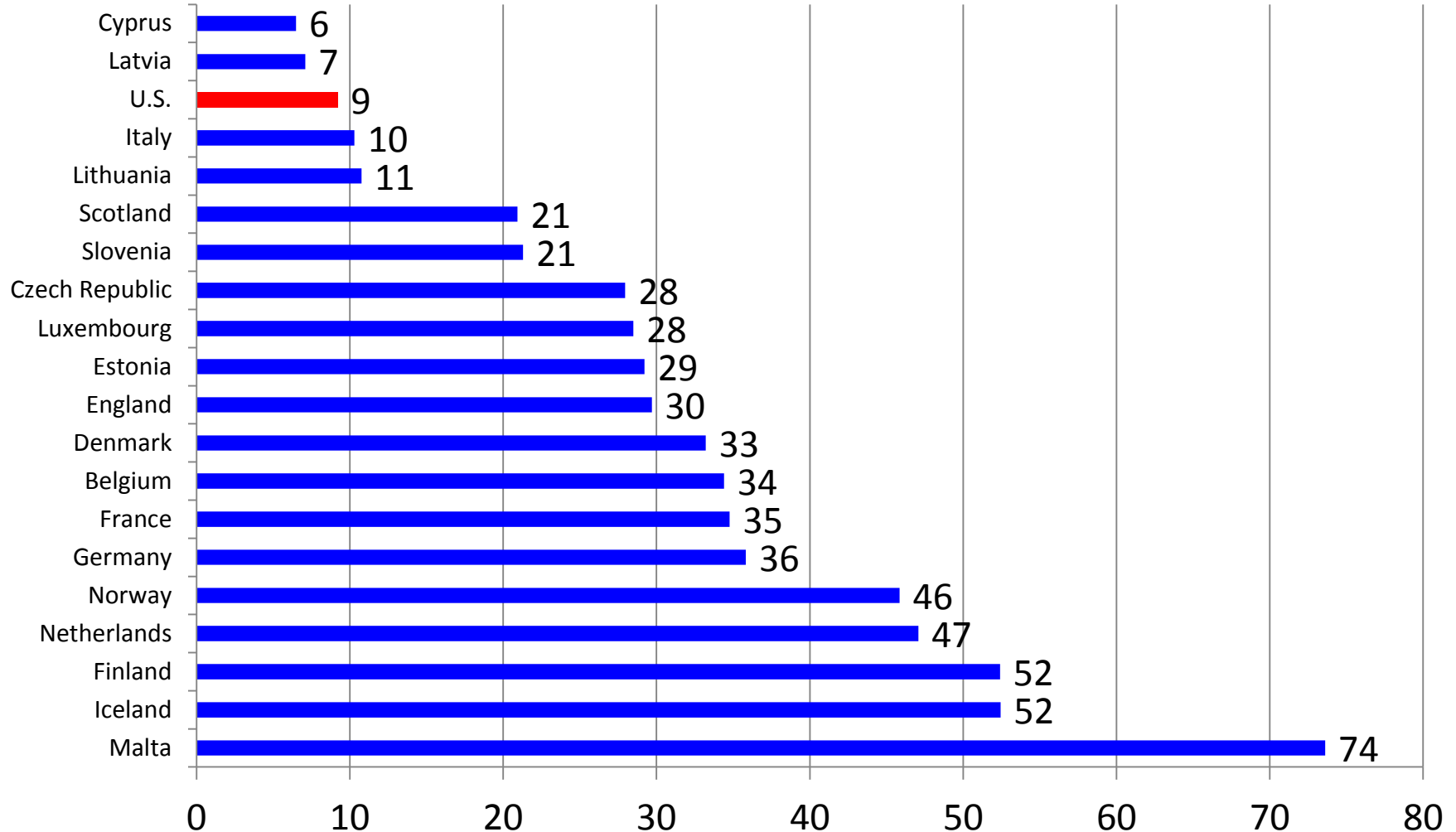
Cesarean Rates (%) in Industrialized Countries* with 100,000+ Births, 2014



* No data on cesarean rates in Greece and Japan



VBAC Rates Industrialized Countries, 2010



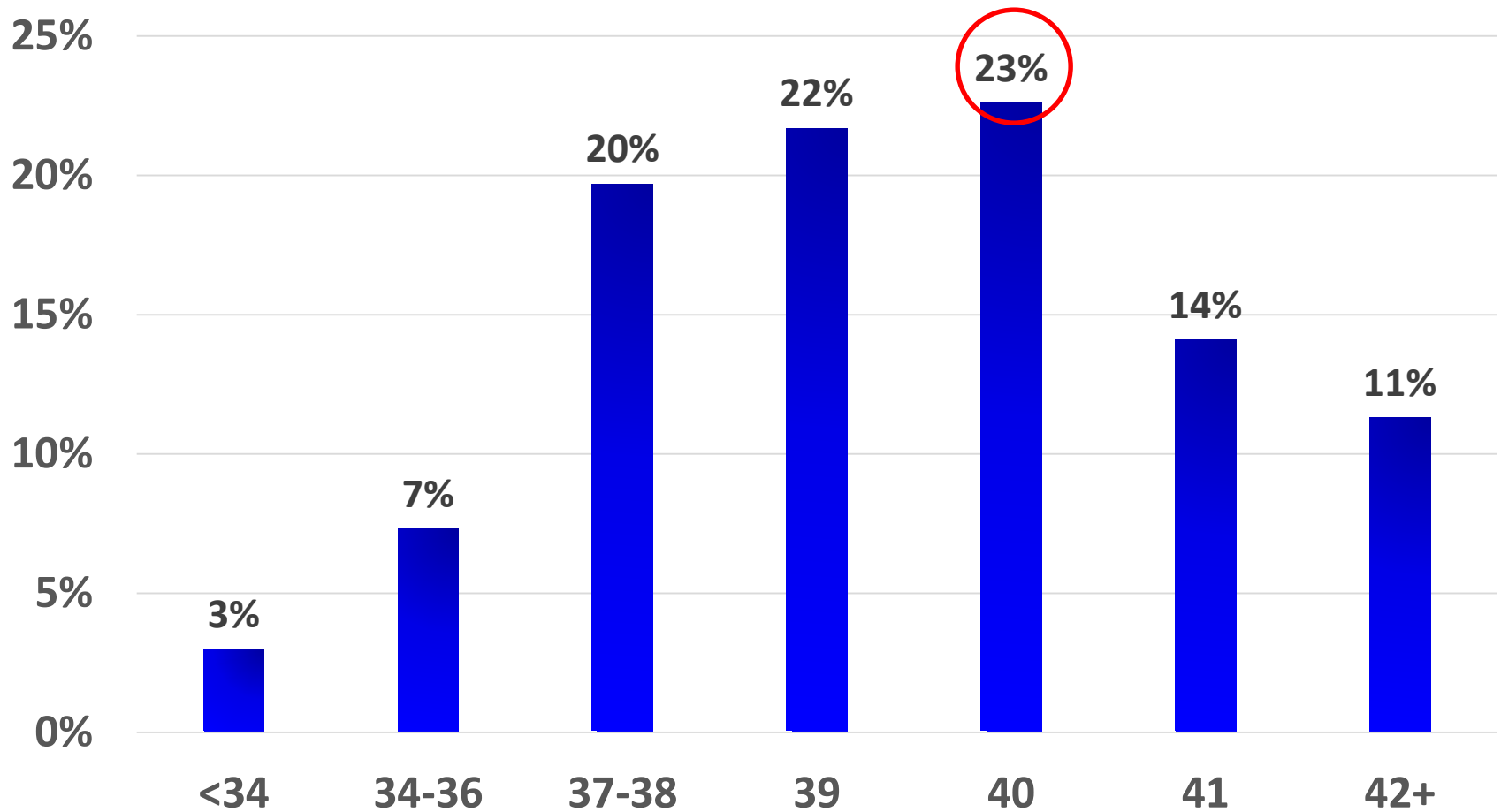


Do High Rates of Intervention Matter?

- 1. Outcomes*
- 2. Costs*

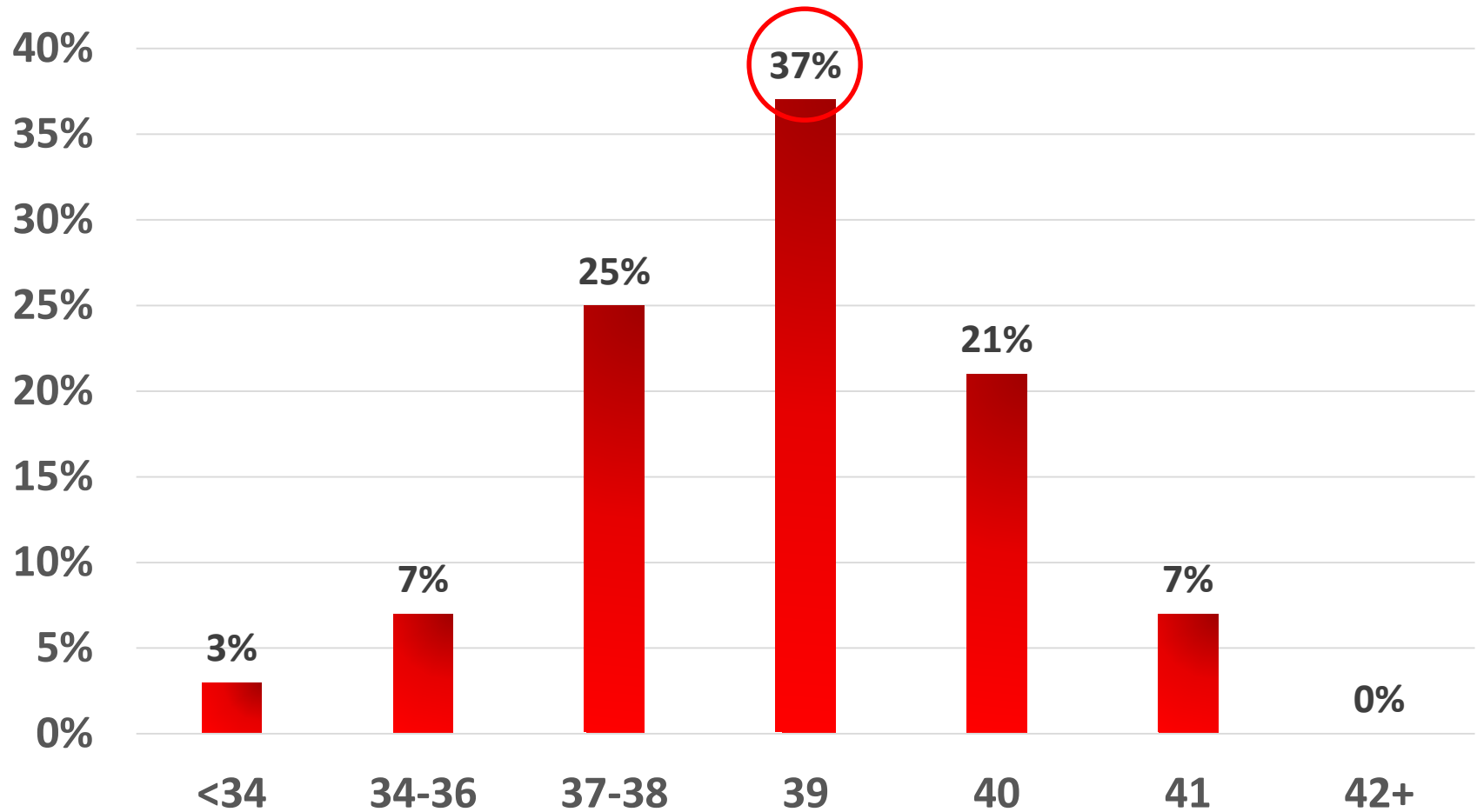


Gestational Age, U.S. All Births, 1990



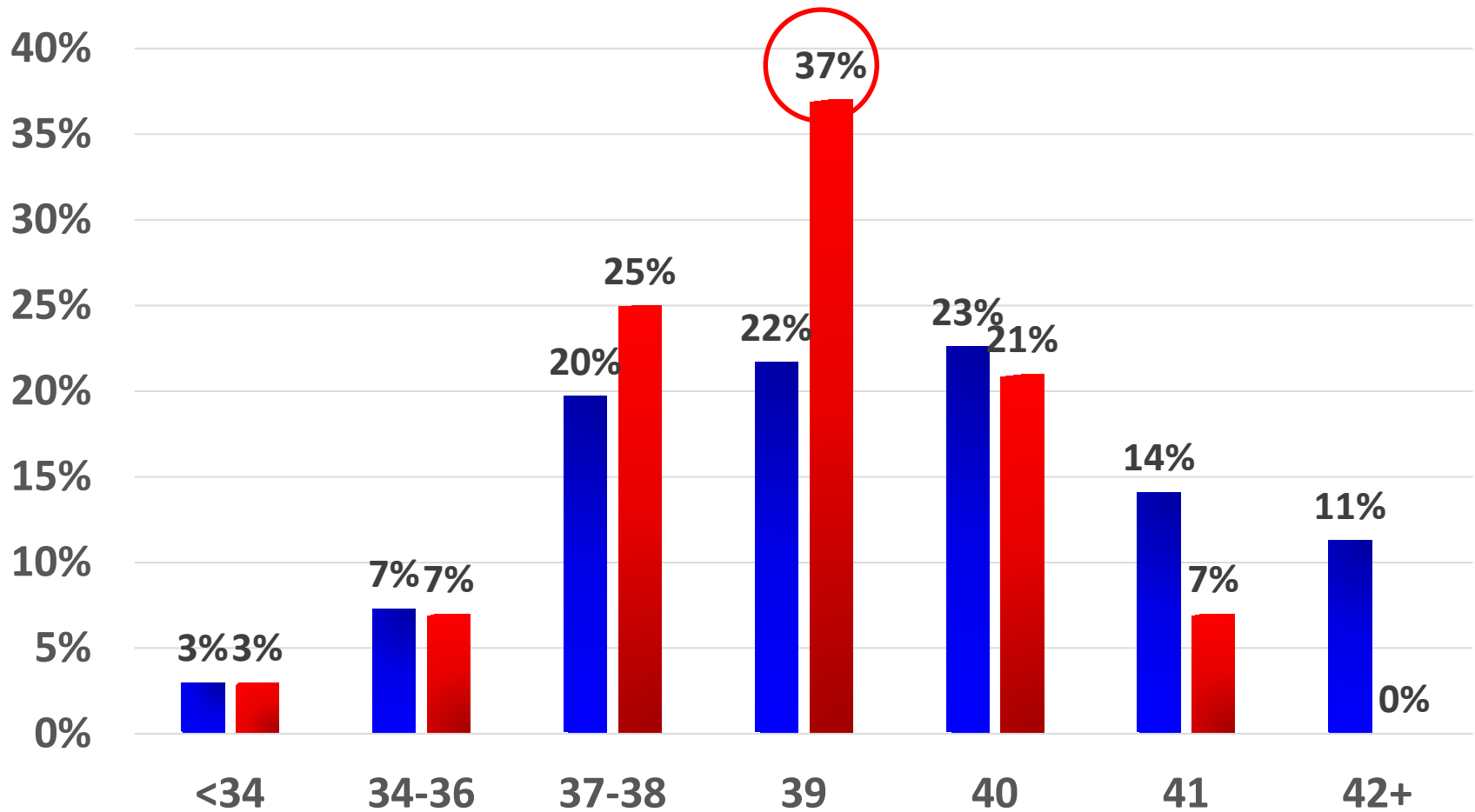


Gestational Age, U.S. All Births, 2015



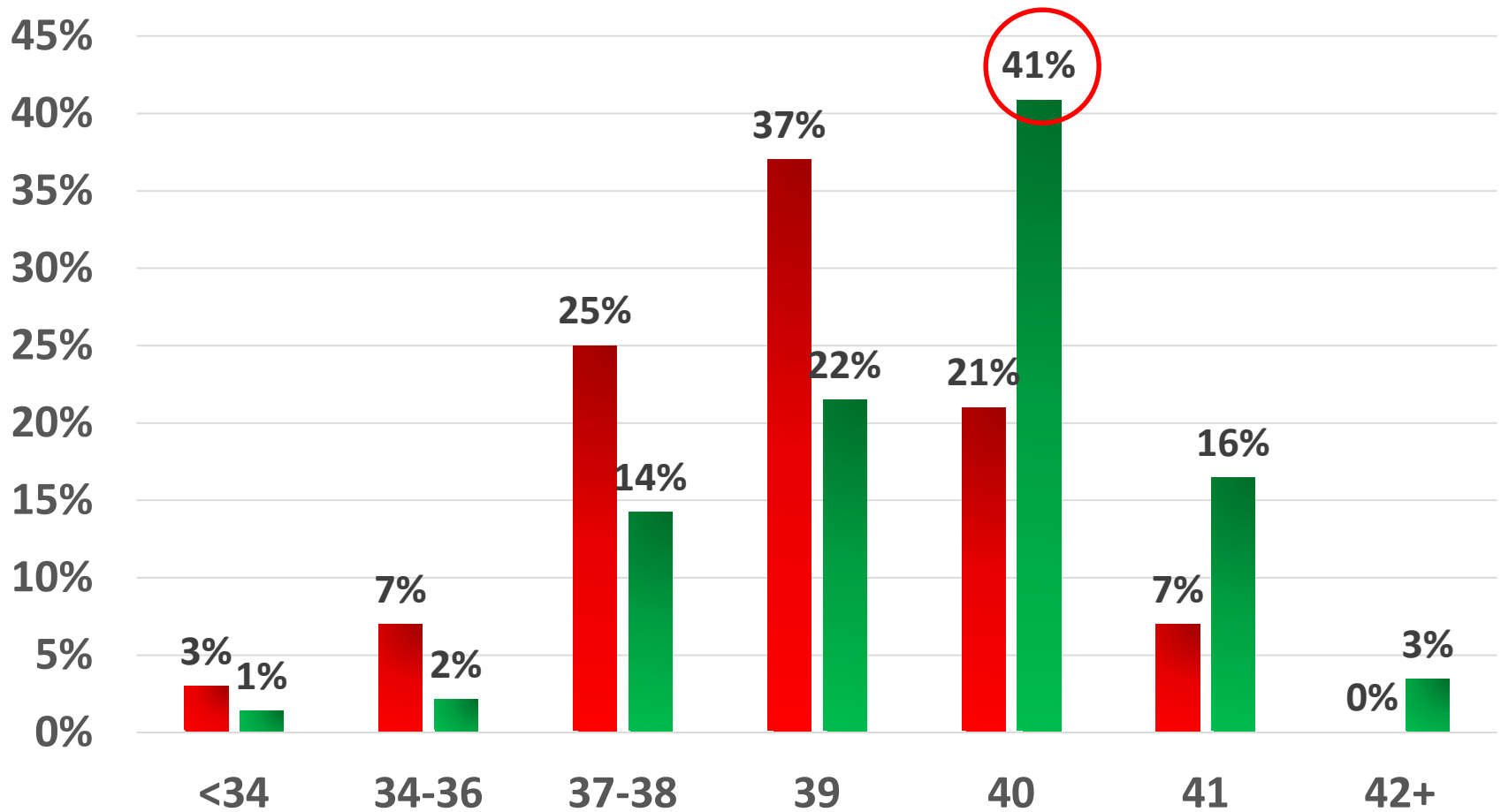


Gestational Age, U.S. All Births, 1990, 2015





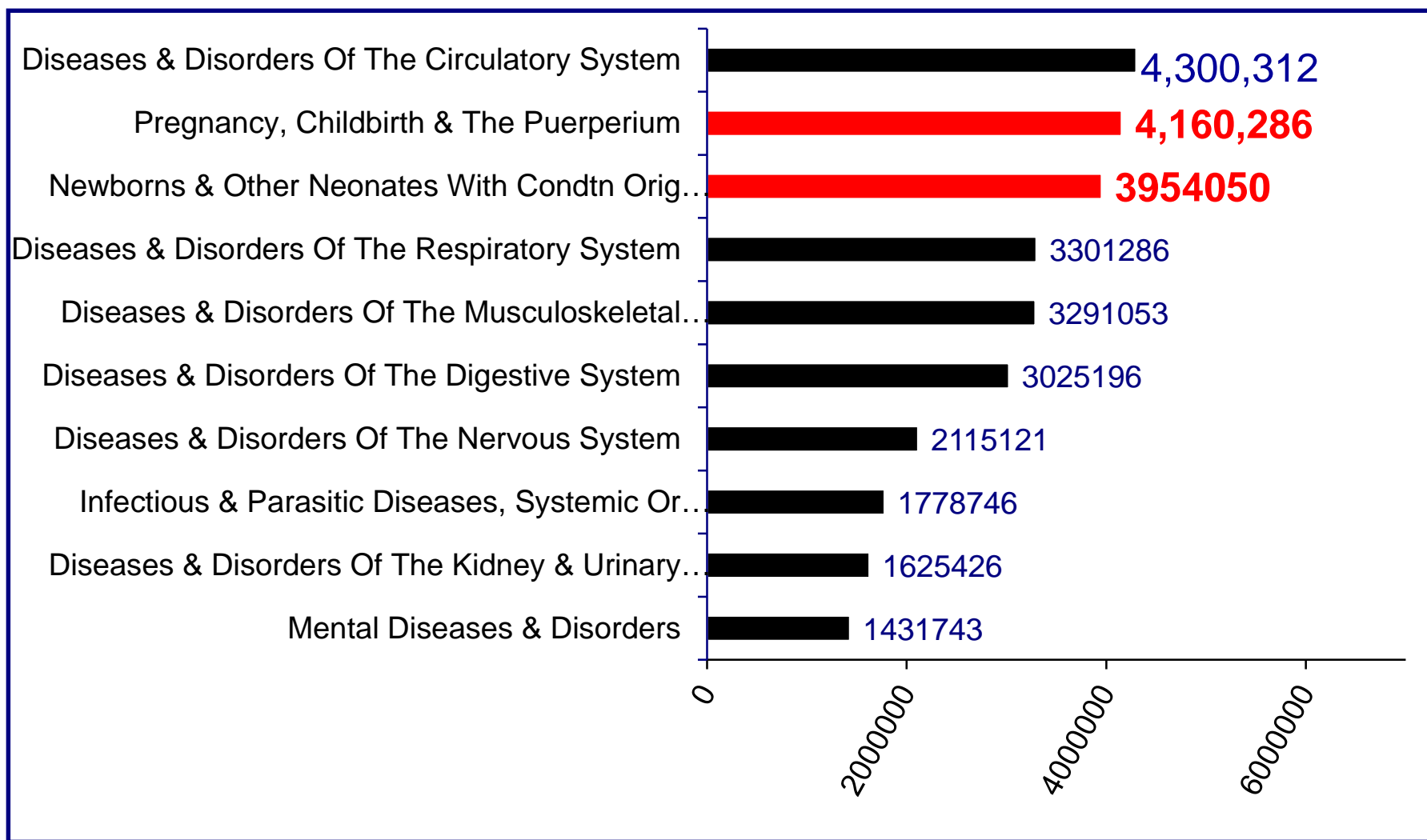
Gestational Age, U.S. All Births & Planned Home Births that Occur at Home, 2015



Economics of Childbirth in the U.S.

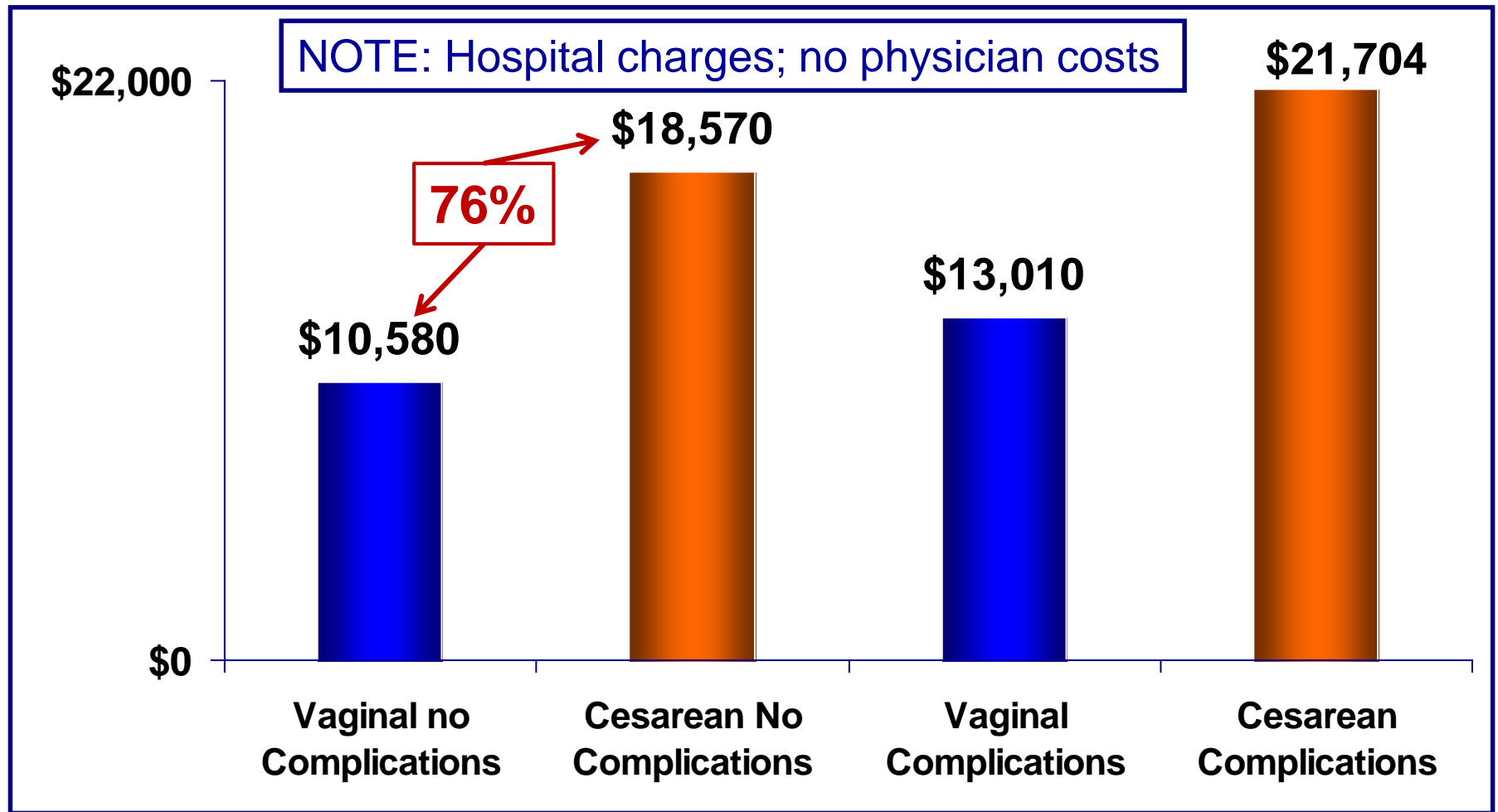


LEADING MAJOR DIAGNOSTIC CATEGORIES by NUMBER OF HOSPITAL DISCHARGES, U.S., 2014



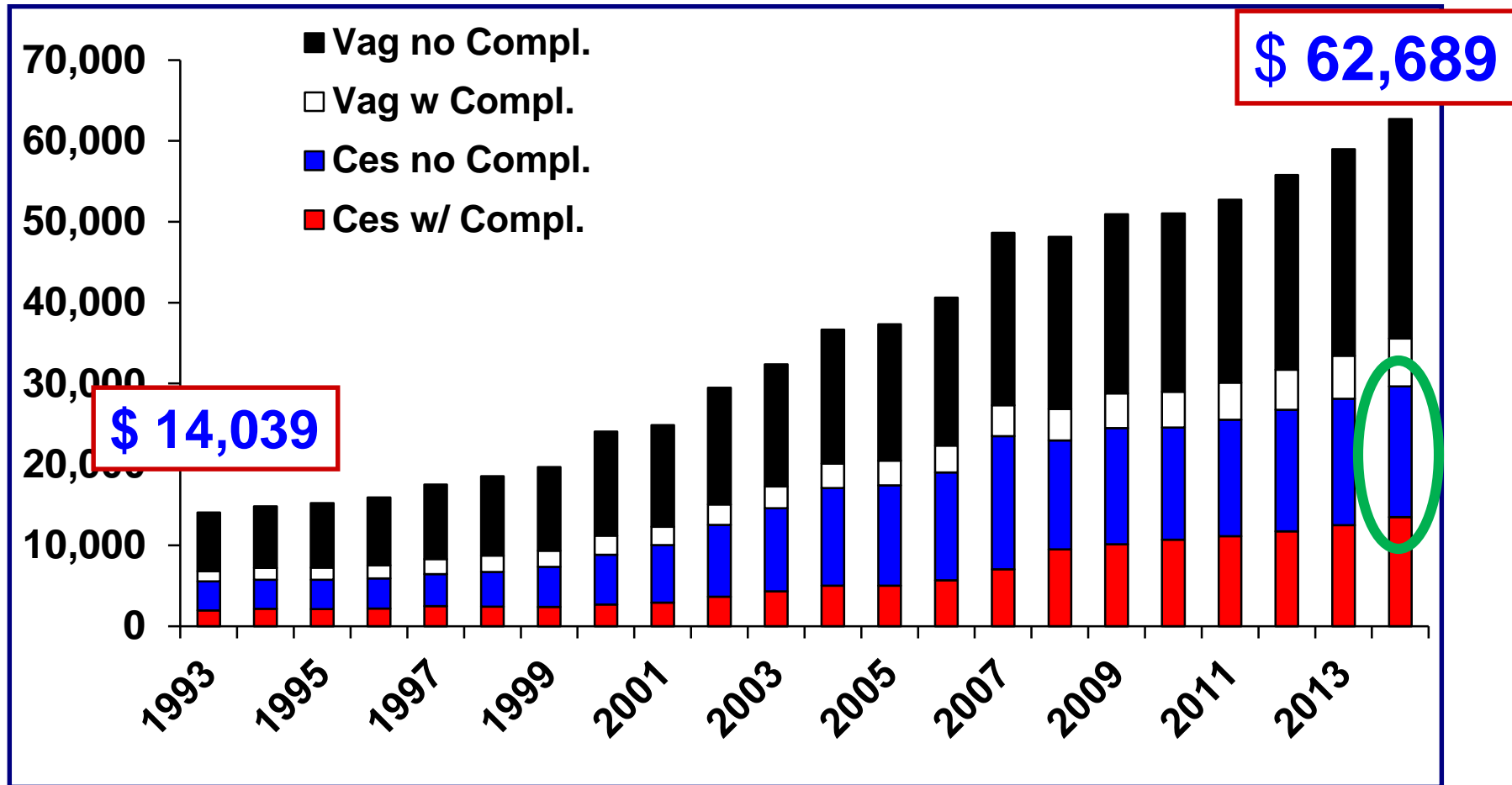


MEDIAN FACILITY LABOR & BIRTH CHARGES BY MODE OF BIRTH, U.S., 2014



Sources: AHRQ. 2017. *HCUPnet, Healthcare Cost & Utilization Project*. Rockville, MD: AHRQ. <http://hcupnet.ahrq.gov> . Accessed 2/18/17;

Estimated Total Charges, Hospital Birth, U.S., 1993-2014 (000,000)



Sources: AHRQ. 2017. *HCUPnet, Healthcare Cost & Utilization Project*. Rockville, MD:

AHRQ. <http://hcupnet.ahrq.gov>. Accessed 2/17/17.

Birthbythenumbers.org

Is it hopeless?

What can be done



- **Evidence** – keep an open mind and ask different questions.
- **Advocacy** – work for change.

Rethinking the Evidence



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS



Society for
Maternal-Fetal
Medicine

OBSTETRIC CARE CONSENSUS

Number 1, March 2014

Safe Prevention of Primary Cesarean Delivery

www.acog.org/Resources_And_Publications/Obstetric_Care_Consensus_Series/Safe_Prevention_of_the_Primary_Cesarean_Delivery

BirthByTheNumbers.org

Childbirth Advocacy Led by Mothers

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April 24 - [Breastfeeding and Beyond](#)

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Thank you to the [14th Street Y](#) for hosting!

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Noelle with Isla Kai © Amanda Gentile

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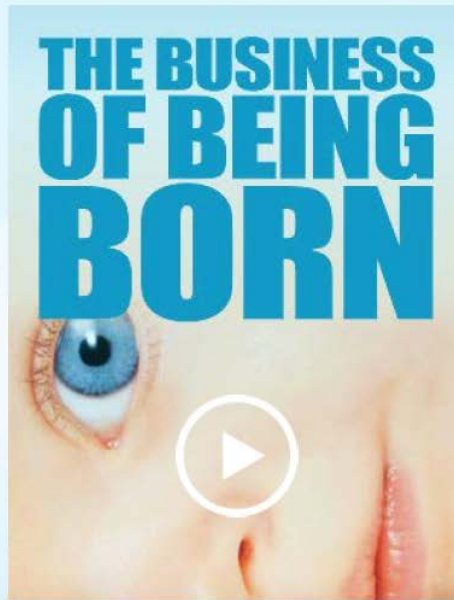
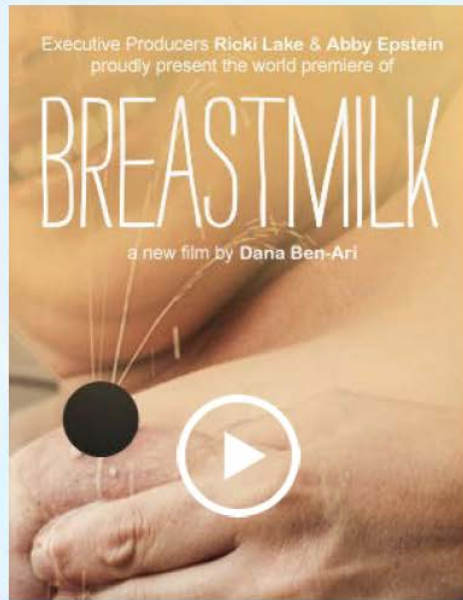
Welcome to Choices in Childbirth

Choices in Childbirth is a non-profit organization that is a national leader in consumer advocacy and outreach for women and their families. At CiC we believe that every woman deserves a safe, respectful and deeply fulfilling birth experience. We help women make informed decisions about where, how and with whom to birth, and ensure that they have access to the full range of birth options. CiC constantly strives to improve maternity care across the country and to ensure that the birth of each child is treated with the reverence that it deserves.

Our Mission

<http://www.choicesinchildbirth.org/>

Childbirth Advocacy Led by Mothers




- DVD of the original *The Business of Being Born* ([view trailer](#))
- Boxed DVD set including all four episodes of *More Business of Being Born*
- Adorable, 100% cotton Moby Knot Hat for ages 0-6 months in your choice of dark brown, pink, teal, purple, tan, maroon, or orange! ([view colors](#))
- Paperback copy of *Your Best Birth* by Ricki Lake and Abby Epstein
- The National Guide to a Healthy Birth




www.thebusinessofbeingborn.com/


Childbirth Advocacy Led by Mothers



for Women
and Families



CHILDBIRTH
CONNECTION
a program of the
national partnership for women & families



for Health
Professionals


For Women

- Understanding & Navigating the Maternity Care System
- Transforming Maternity Care Partnership
- Choosing a Caregiver
- Choosing a Place of Birth
- Induction of Labor
- Labor Support
- Labor Pain
- Cesarean Section
- Preventing Pelvic Floor Dysfunction
- VBAC or Repeat C-Section
- Planning Pregnancy
- Pictures of Your Growing Body & Baby
- Milbank Report: *Evidence-Based Maternity Care*
- Listening to Mothers Surveys & Reports
- Journey to Parenthood A Pregnancy Book
- The Rights of Childbearing Women
- Quotes from Mothers
- Best Pregnancy Resources A-Z
- Best Pregnancy Books
- Best Pregnancy Videos

For Health Professionals

- Transforming Maternity Care Partnership
- Evidence-Based Maternity Care Resource Directory
- Evidence Columns
- Systematic Reviews
- Milbank Report: *Evidence-Based Maternity Care*
- Listening to Mothers Surveys & Reports
- Pregnancy Resources for Women
- The Rights of Childbearing Women

Listening to MothersSM III Pregnancy and Birth



Eugene R. Declercq
Carol Sakala
Maureen P. Corry
Sandra Applebaum
Ariel Herrlich

May 2013

Report of the Third National U.S. Survey of Women's Childbearing Experiences

<https://www.childbirthconnection.org/>

Childbirth Advocacy Led by Mothers

Orgasmic Birthtm
The Best-Kept Secret

Breaking News

Debra's 2014 Workshop Schedule

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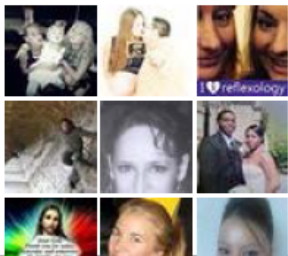


Orgasmic Birth:
The Best Kept
Secret (fan page)



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Online resources

Websites of Birth Experts in the Film

Click on each name or group to visit the website of a birth expert featured in *Orgasmic Birth*.

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[Elizabeth Davis, BA, CPM](#)

[Robbie Davis-Floyd, PhD](#)

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[Anne Margolis, CNM, NP, RNC, MSN](#)

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- ◆ [Emotional Well-Being](#)
- ◆ [Environmental and Occupational Health](#)
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- ◆ [Safer Sex](#)
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- ◆ [Considering Parenting](#)
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 www.birthbythenumbers.org



Birth by the Numbers Team

8 doulas



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