

Birth, death and contemporary media coverage in the U.S.

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Boston University School of Public Health

Health Journalism 2017

Orlando, FL

April 21, 2017

Collaborators





BIRTH *by the* NUMBERS



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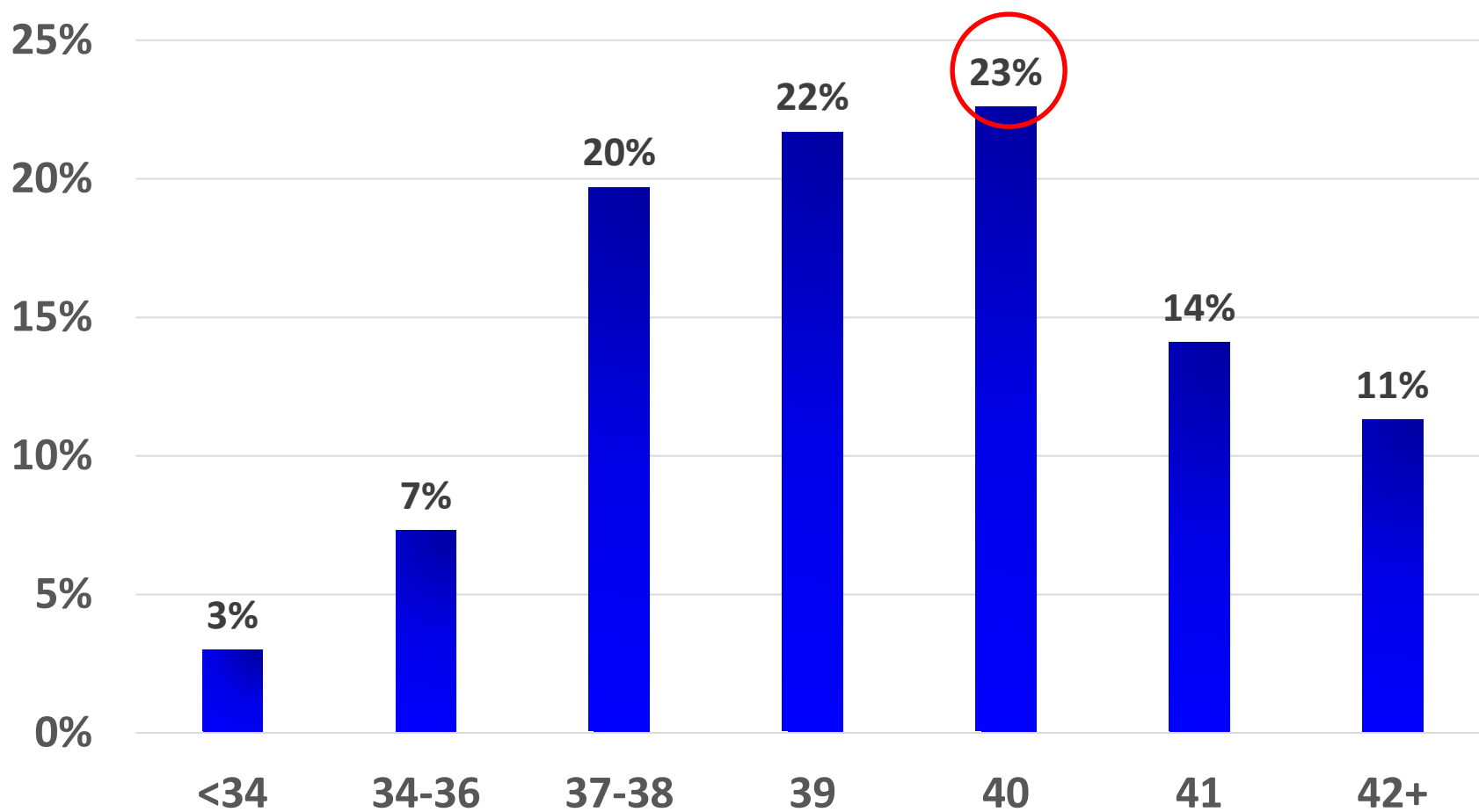


Email: birthbynumbers@gmail.com

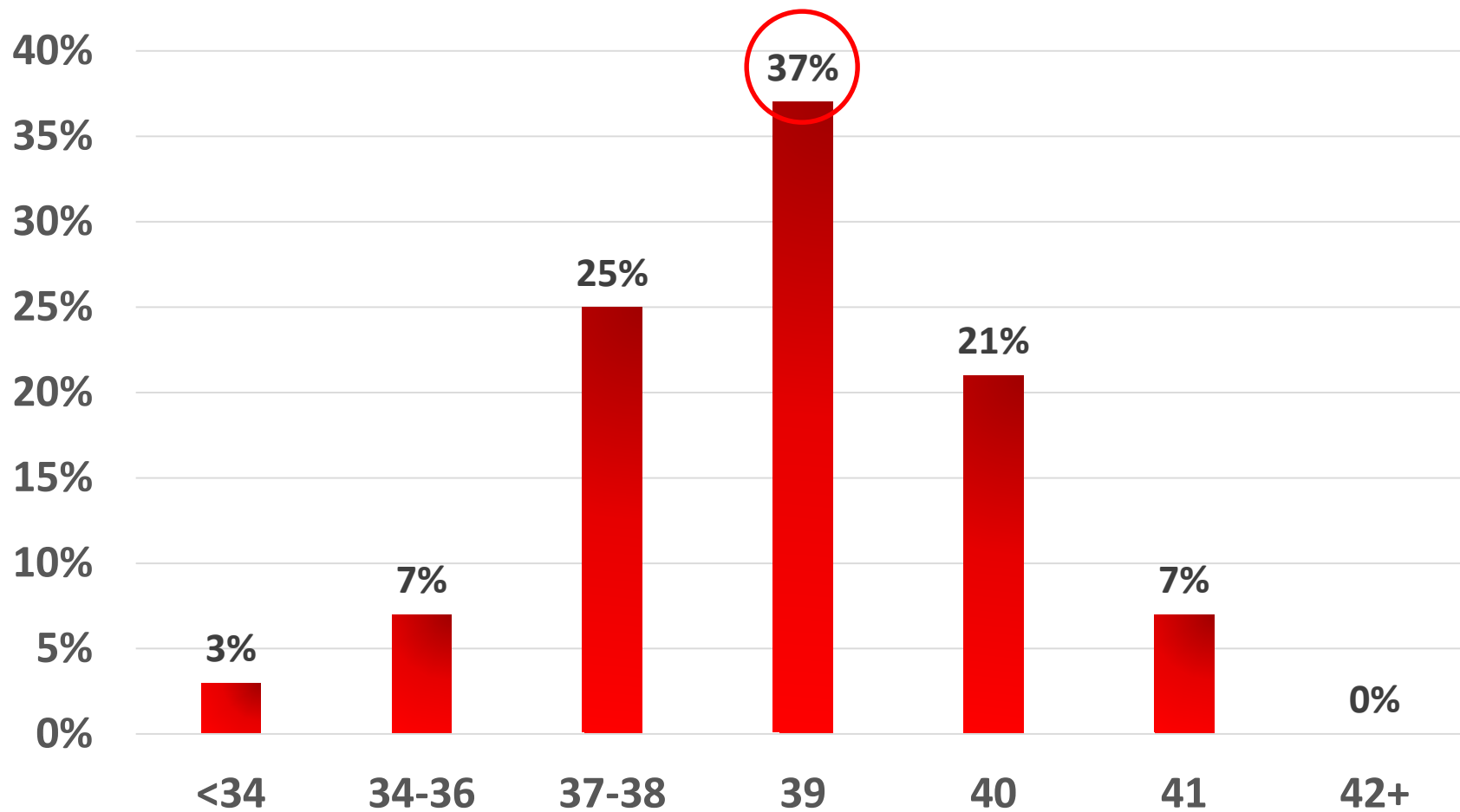
www.birthbythenumbers.org

***Want to know how
much birth has
changed in America?***

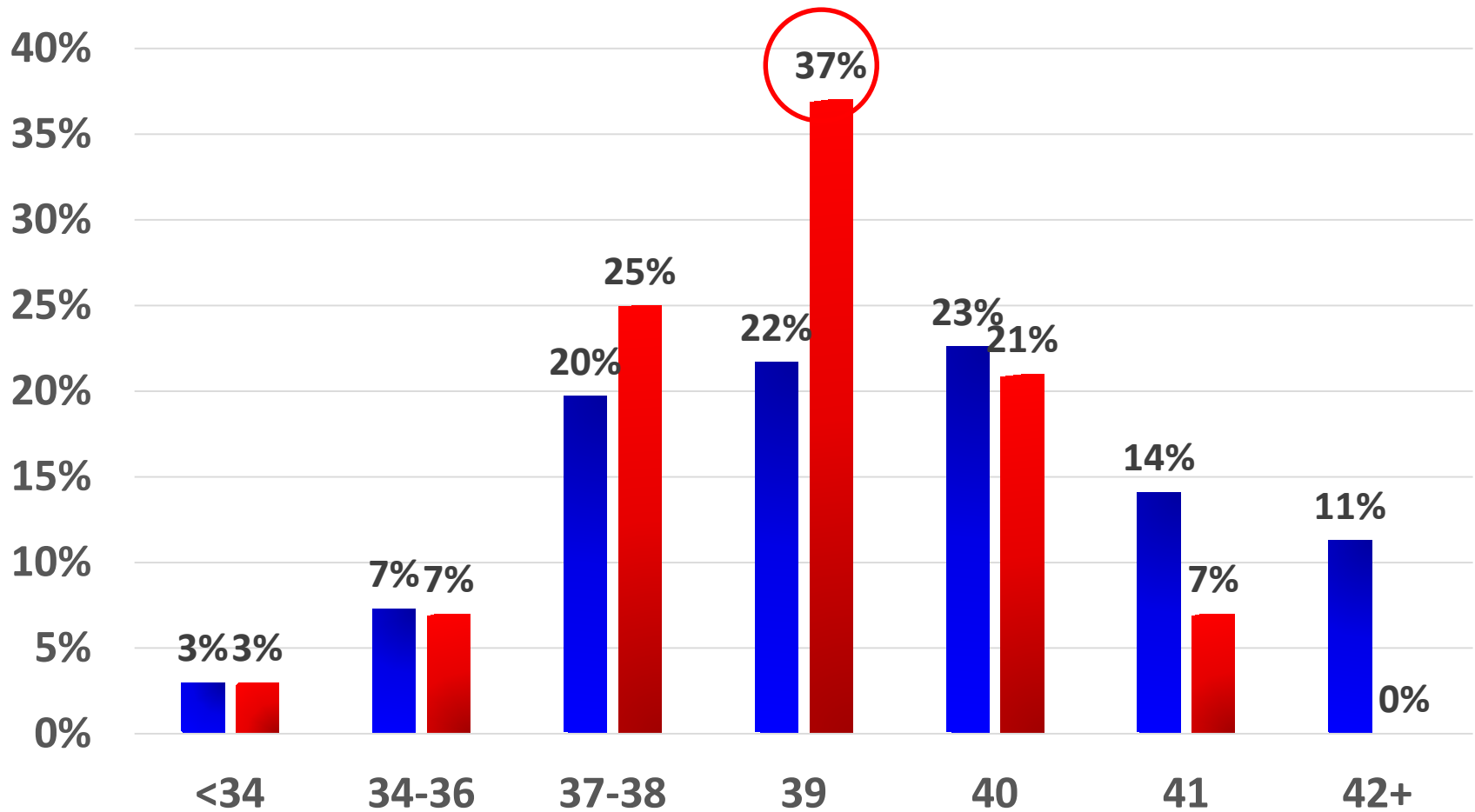
Gestational Age, U.S. All Births, 1990



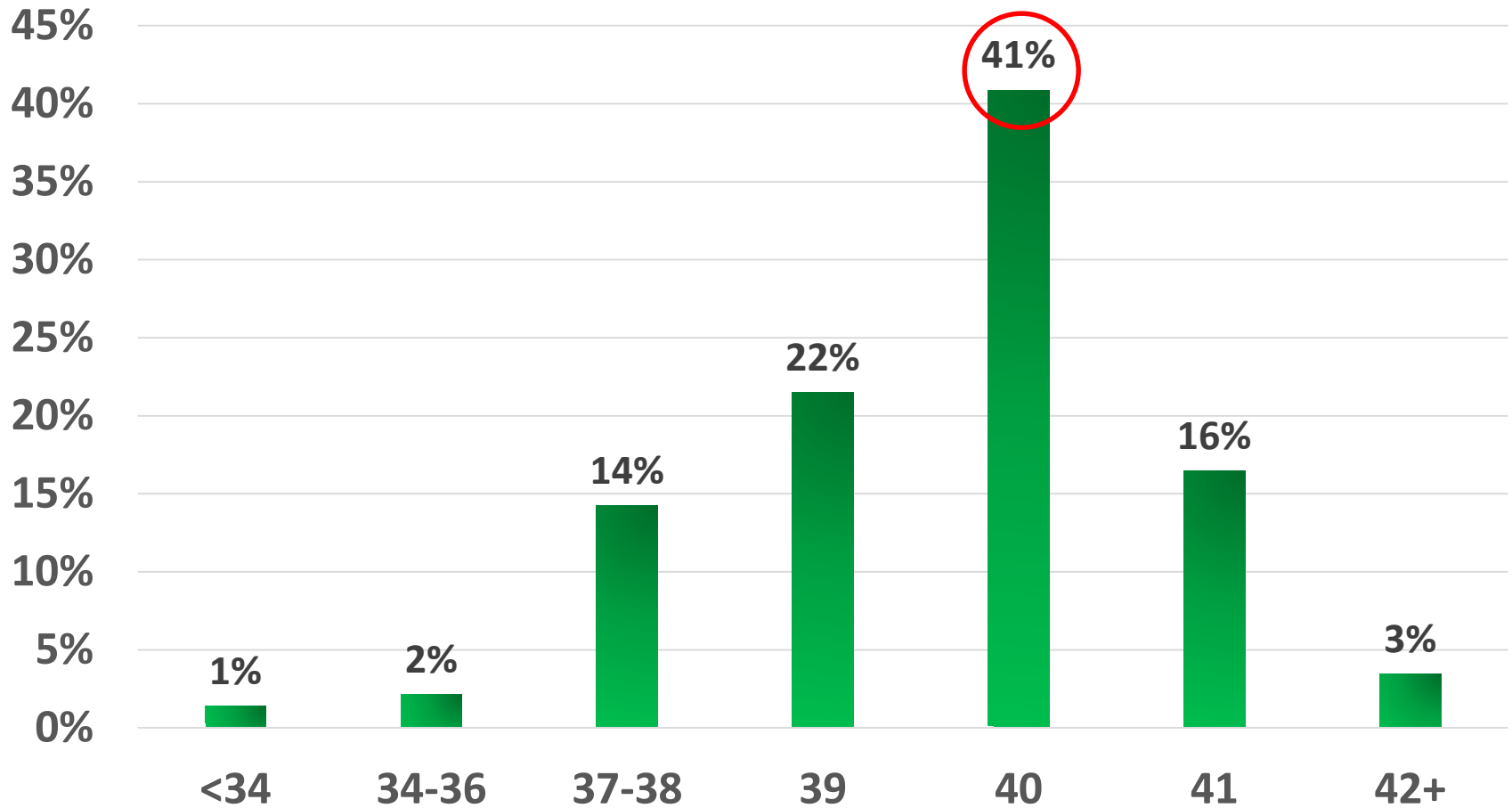
Gestational Age, U.S. All Births, 2015



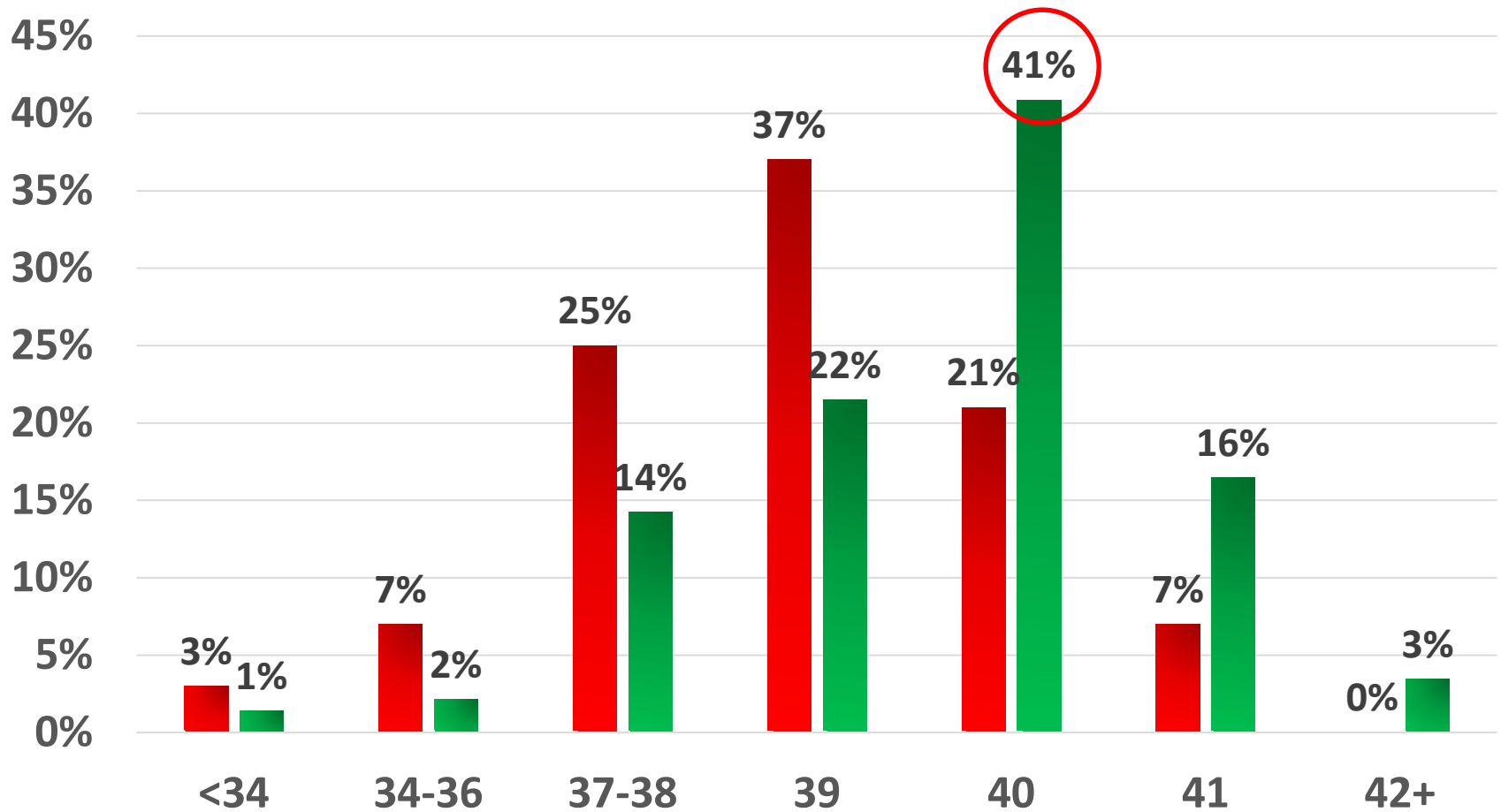
Gestational Age, U.S. All Births, 1990, 2015



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



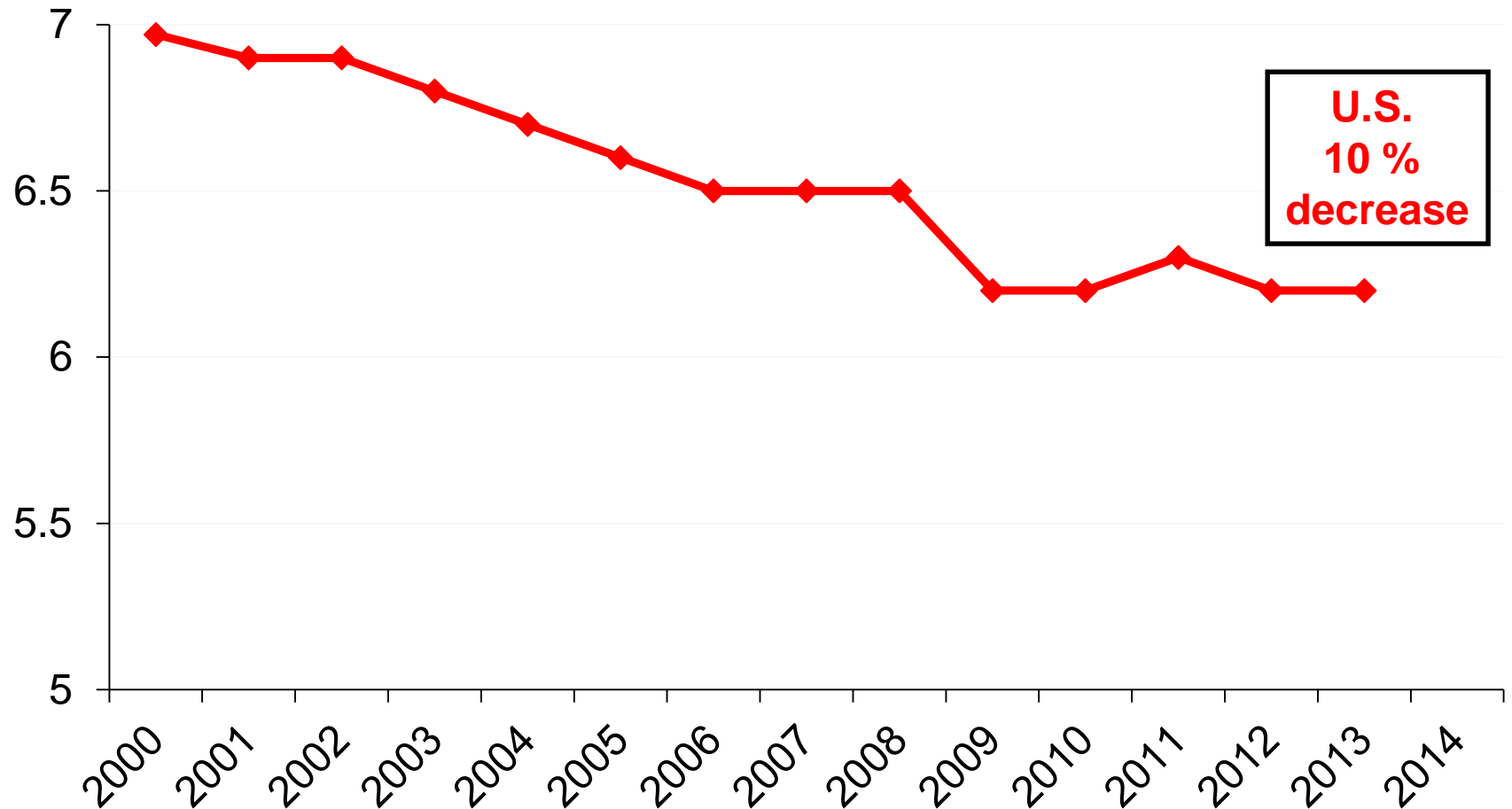
Gestational Age, U.S. All Births & Planned Home Births that Occur at Home, 2015



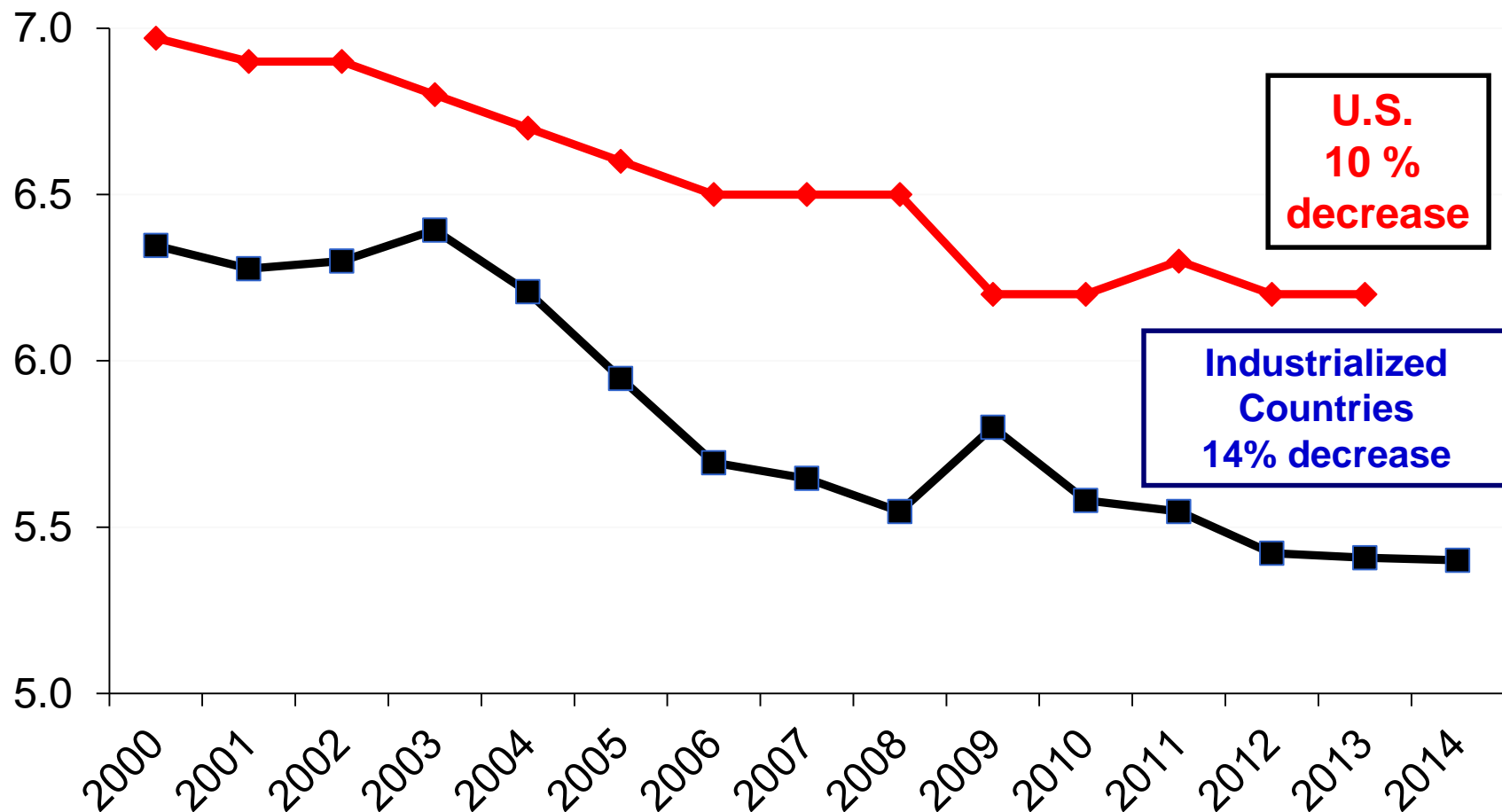
This change could be entirely worthwhile if it improved outcomes.

Much of the focus of the change was preventing stillbirths.

U.S. Perinatal Mortality Rates, 2000-2014

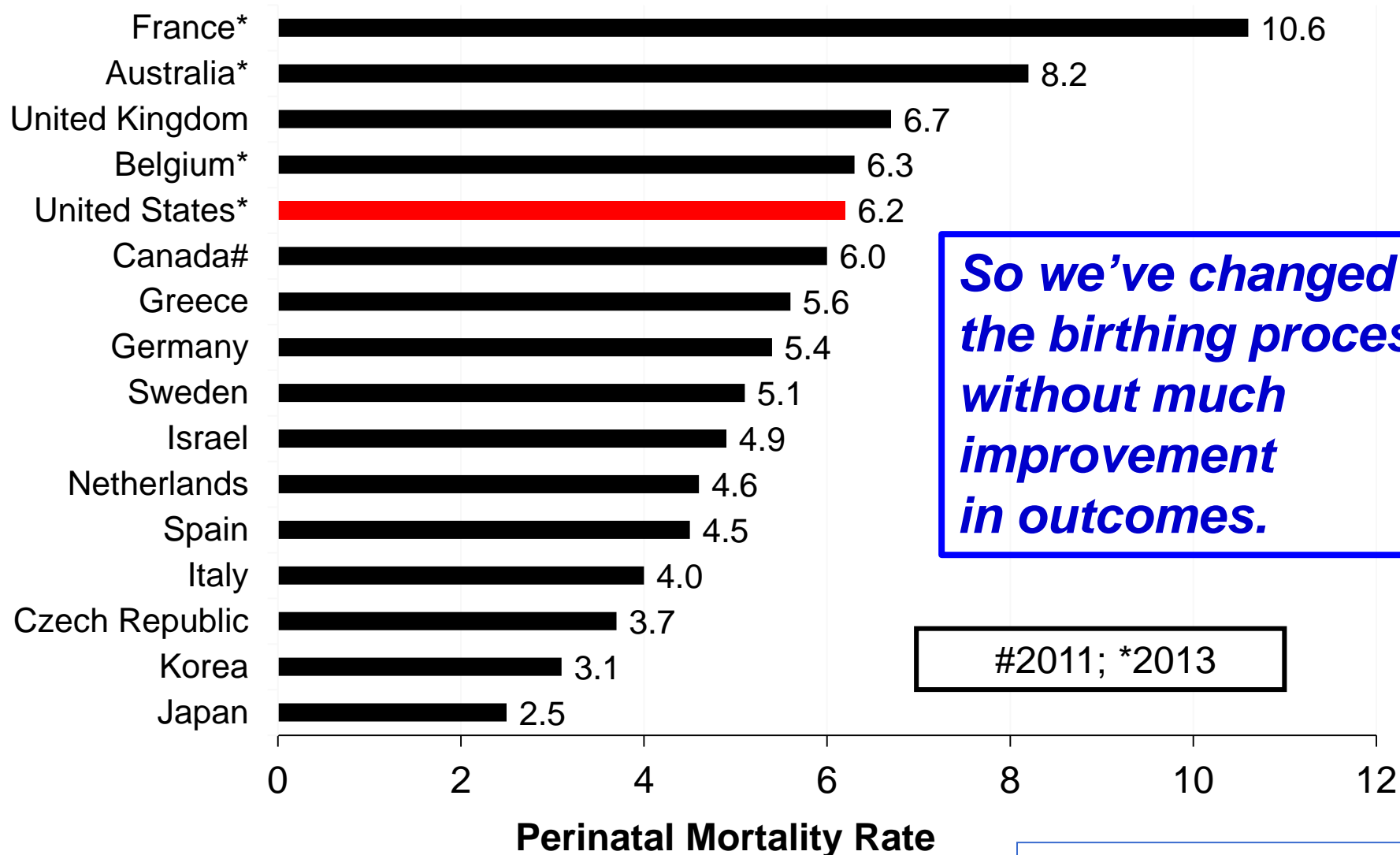


Perinatal Mortality Rates, 2000-2014 , U.S., & Ave. for Industrialized Countries*



* Countries with 100,000+ births (2014): Australia, Belgium, Canada, Czech Republic, France, Germany, Greece, Israel, Italy, Japan, Netherlands, S. Korea, Spain, Sweden, United Kingdom

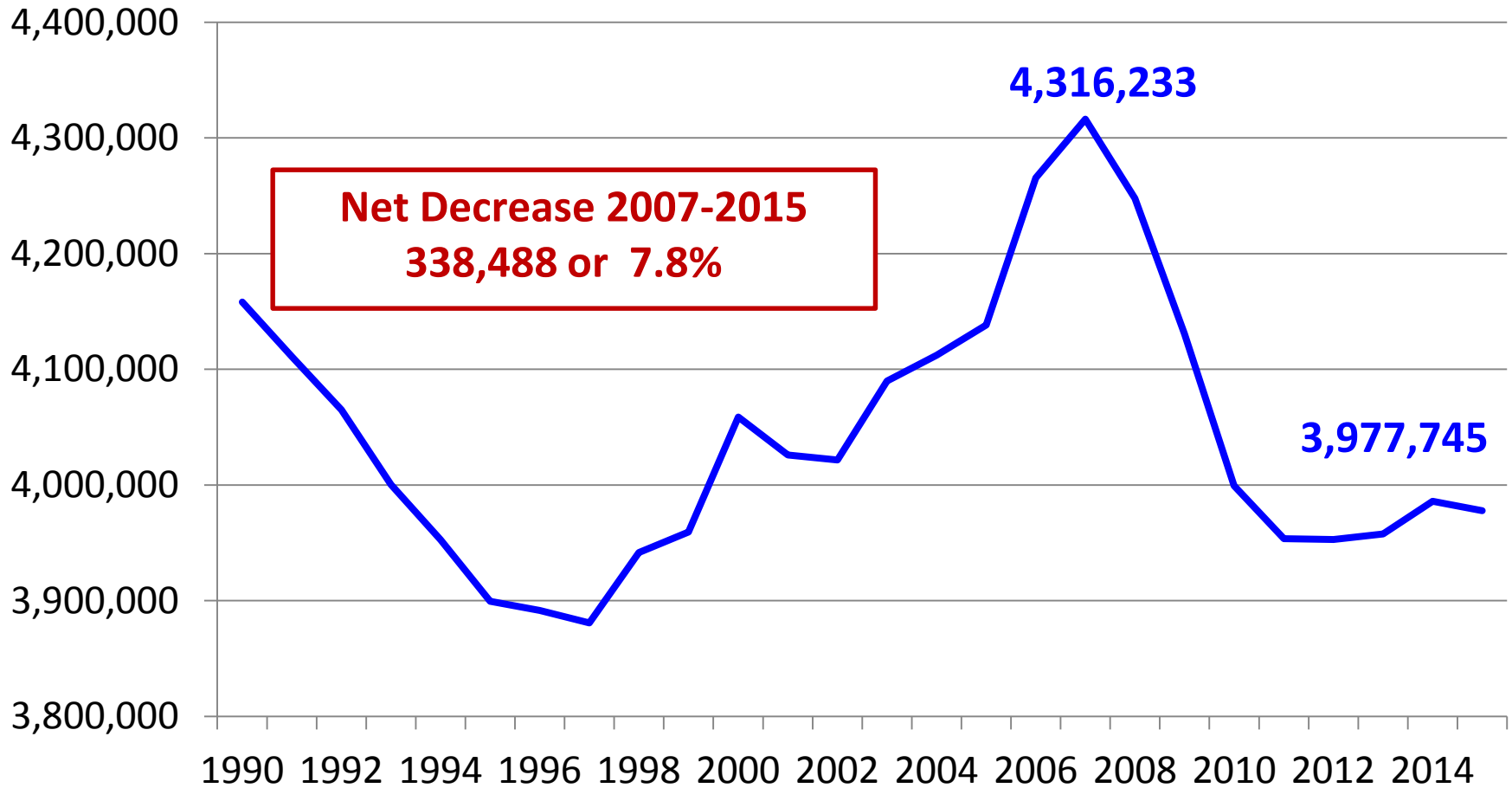
Perinatal Mortality Rates (per 1,000 births), 2014, Industrialized Countries 100,000+ Births



Five Other Quick Points on Birth in America

1. Birth is a big deal in the U.S. Health System

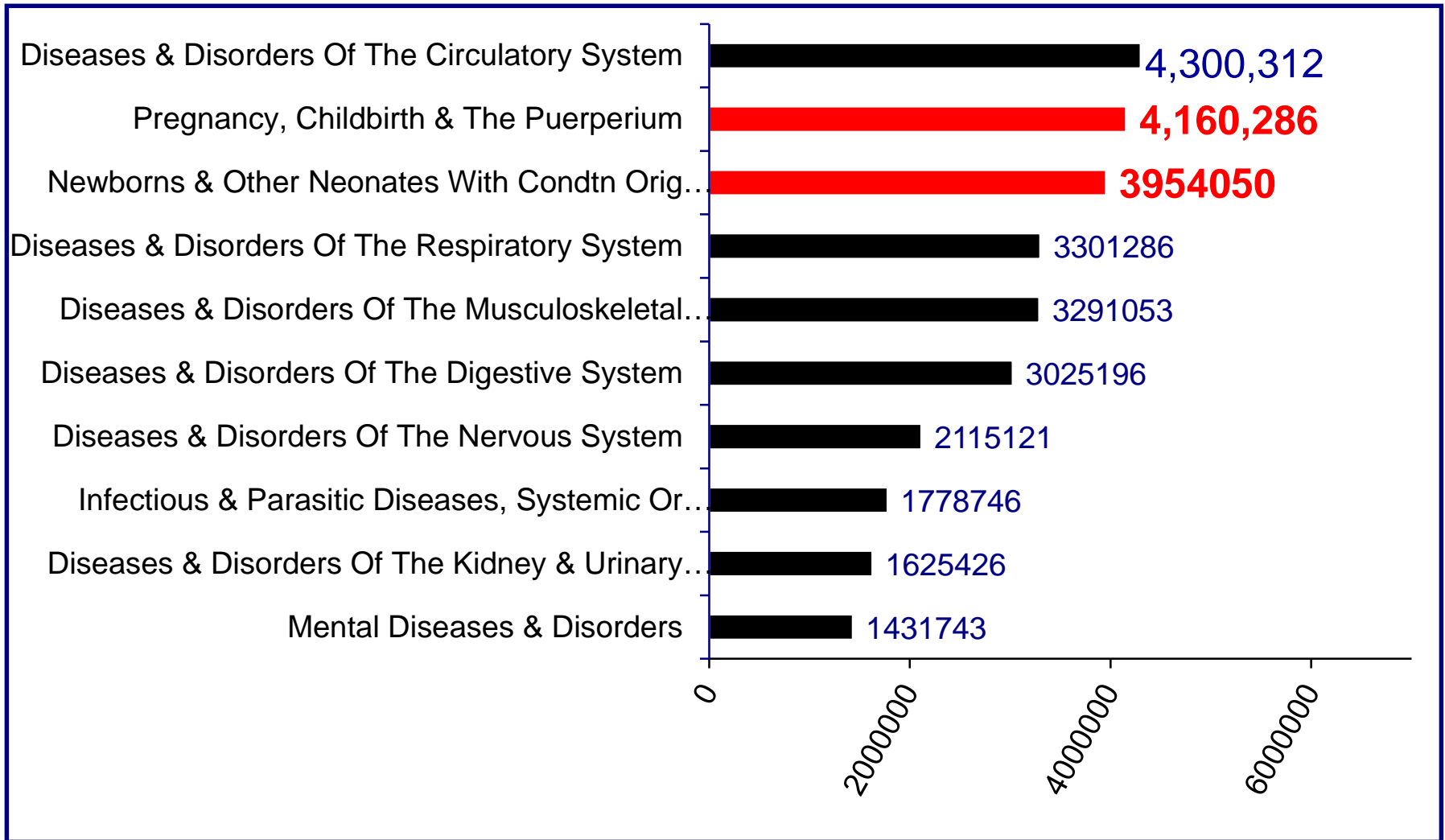
Total U.S. Births, 1990-2015



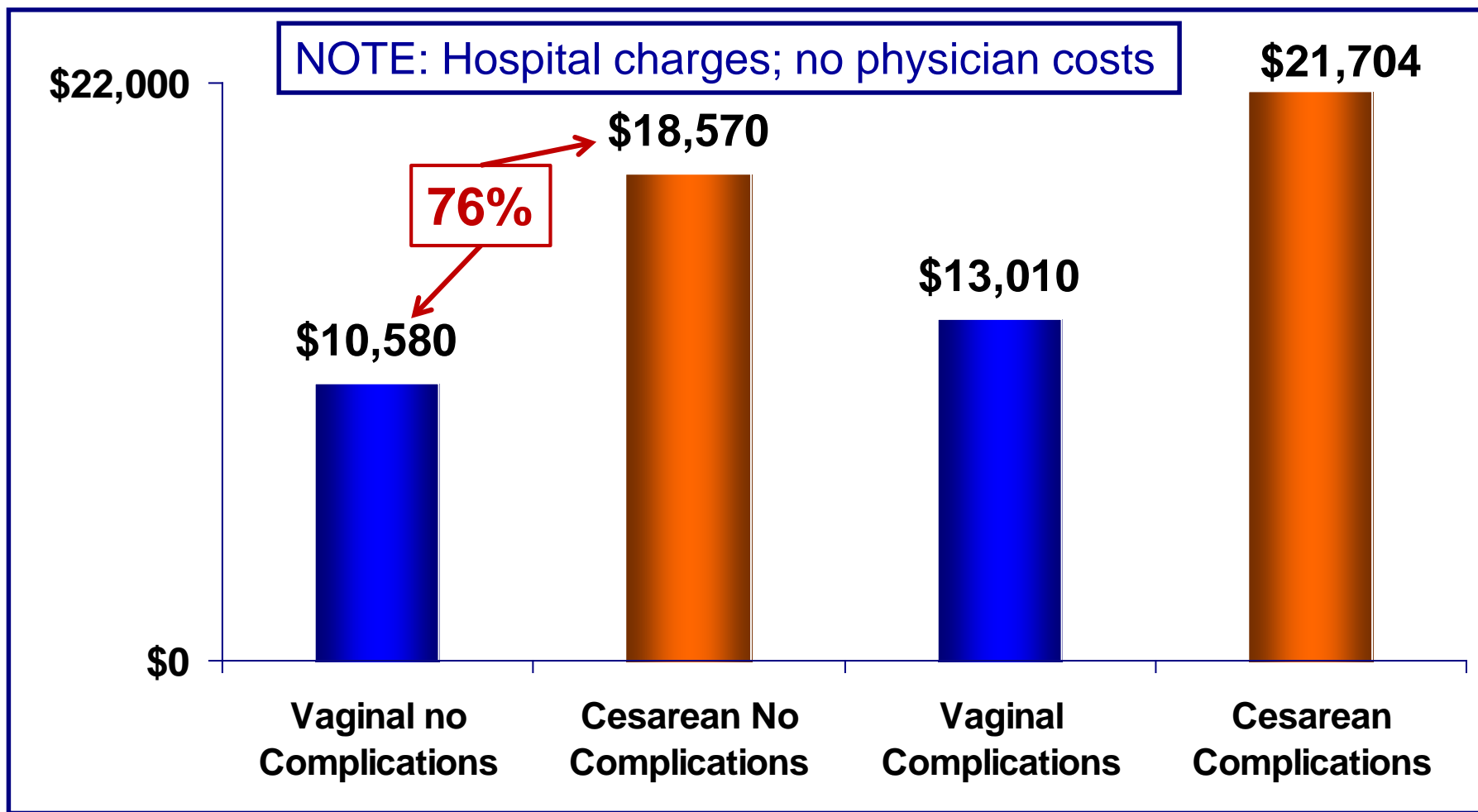
Source: Adapted from CDC VitalSTATS. <http://www.cdc.gov/nchs/VitalStats.htm>

BirthByTheNumbers.org

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

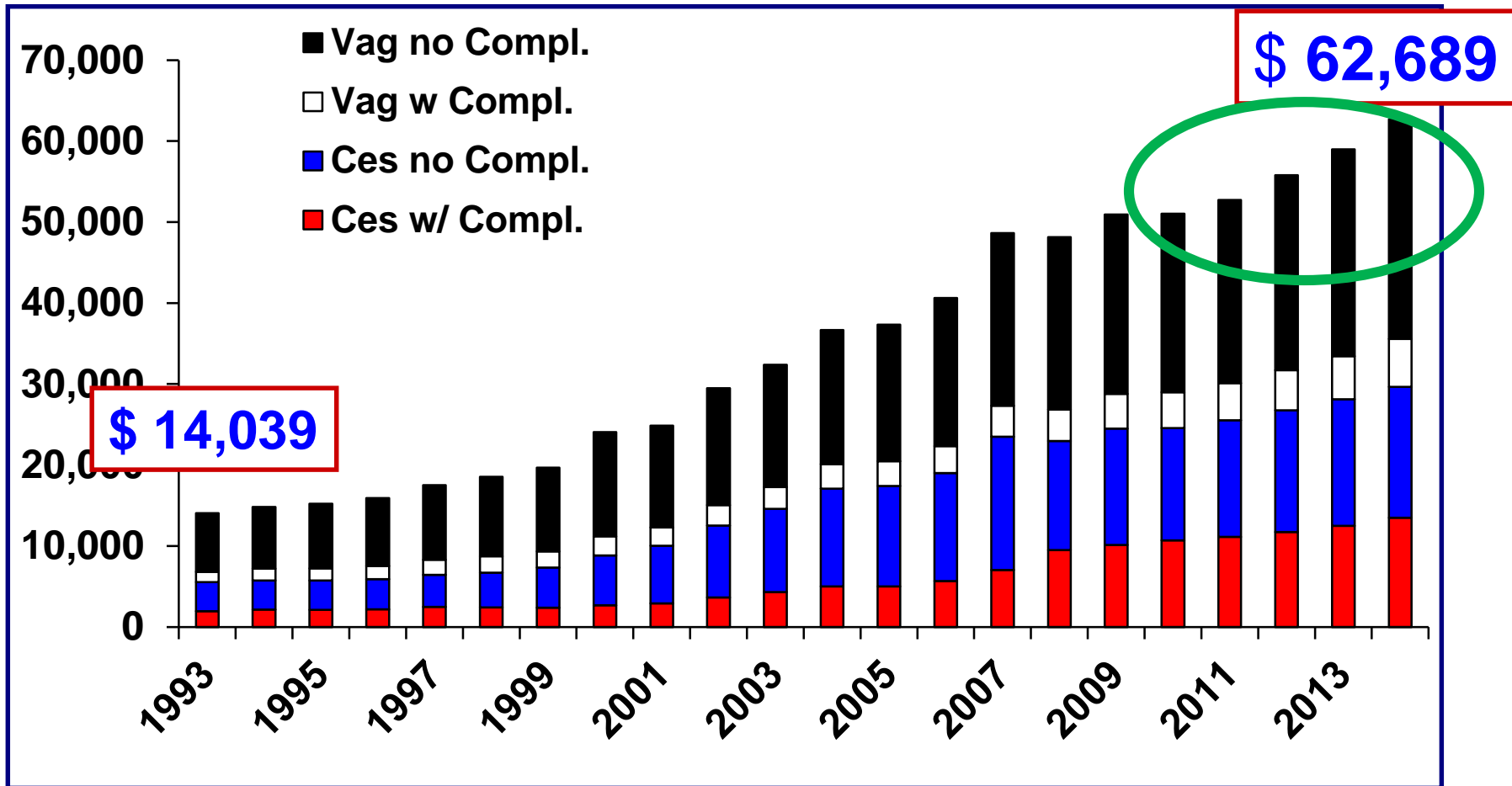


MEDIAN FACILITY LABOR & BIRTH CHARGES BY MODE OF BIRTH, U.S., 2014



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:

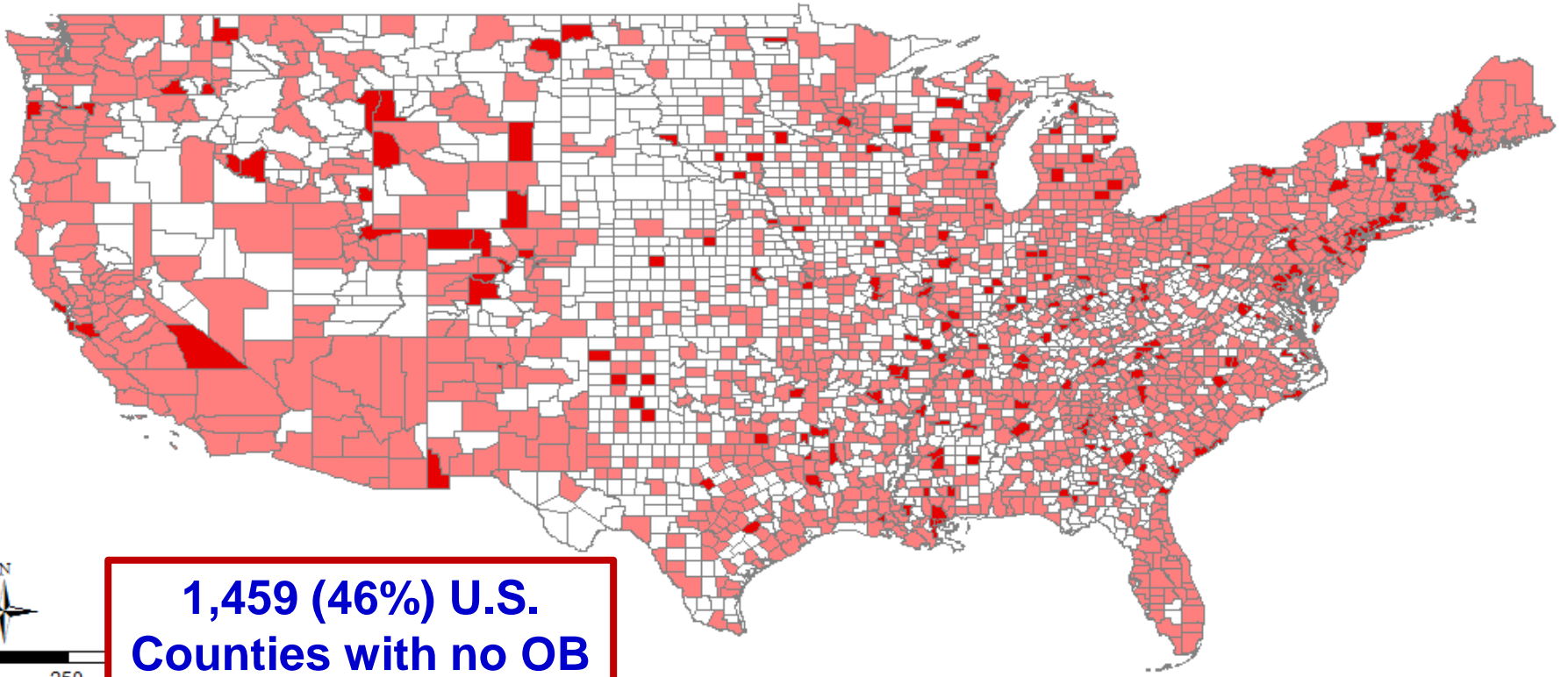
AHRQ. <http://hcupnet.ahrq.gov>. Accessed 2/17/17.

Birthbythenumbers.org

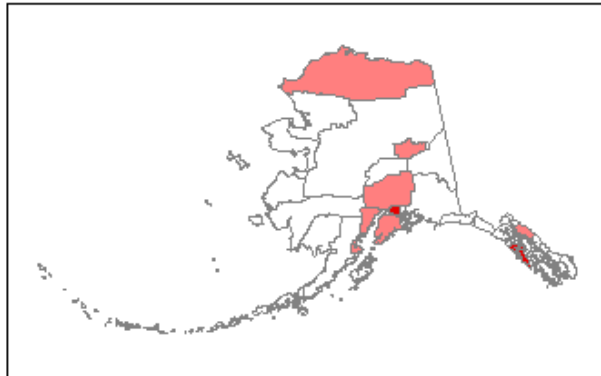
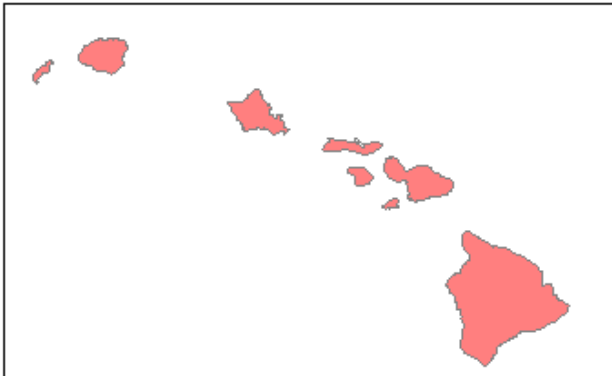
2. There's a serious maldistribution of maternity care providers in the U.S.

OBGYN per 100K, 2011

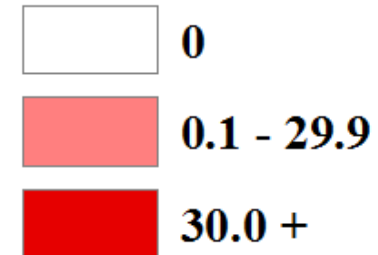
3,142 U.S.
Counties



1,459 (46%) U.S.
Counties with no OB



OBGYN per 100,000

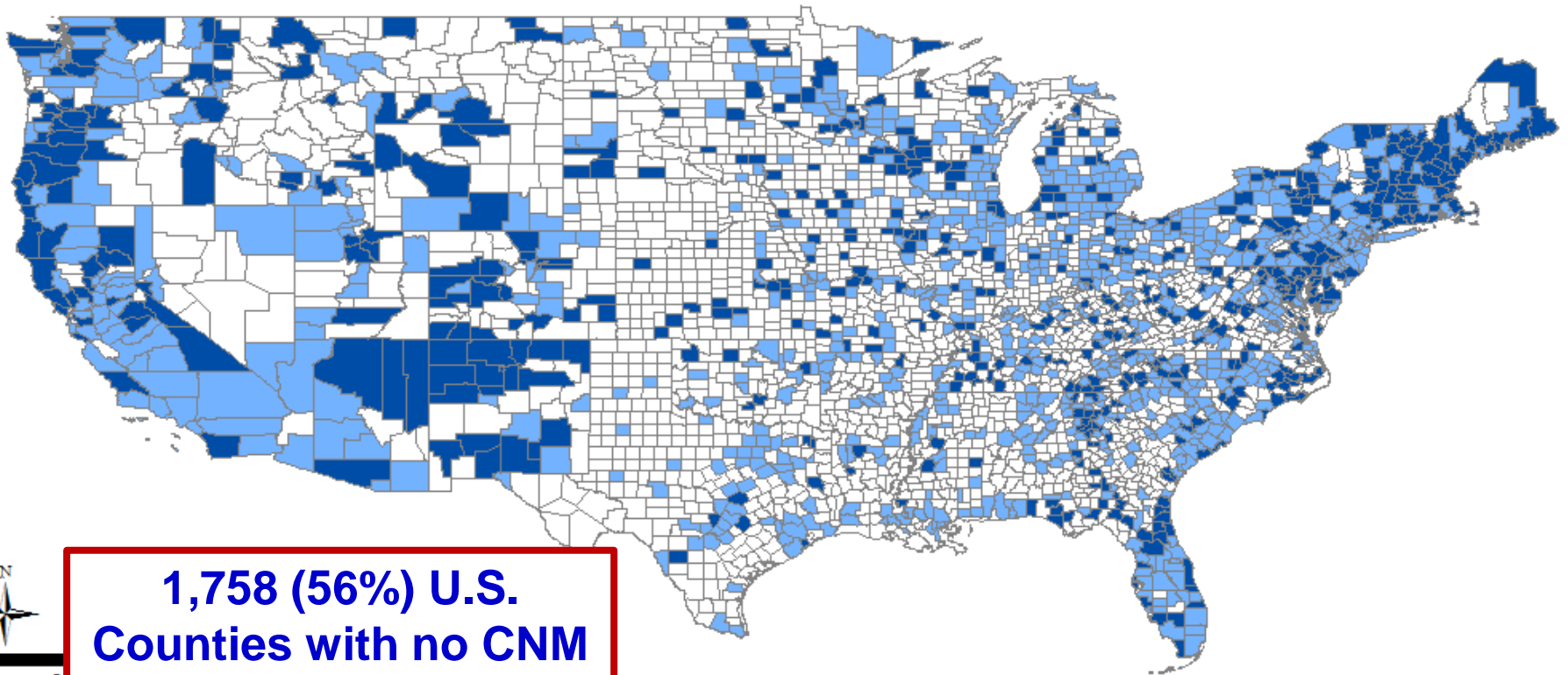


Map Created By: Kate Crawford on 3/1/2014
Birth By The Numbers (www.birthbythenumbers.org)

SOURCE: Area Resource File

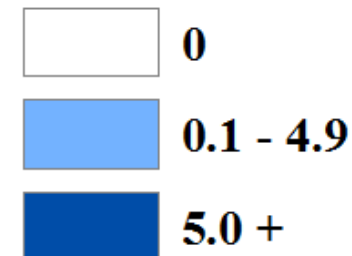
CNMs per 100K, 2011

**3,142 U.S.
Counties**



**1,758 (56%) U.S.
Counties with no CNM**

CNM per 100,000

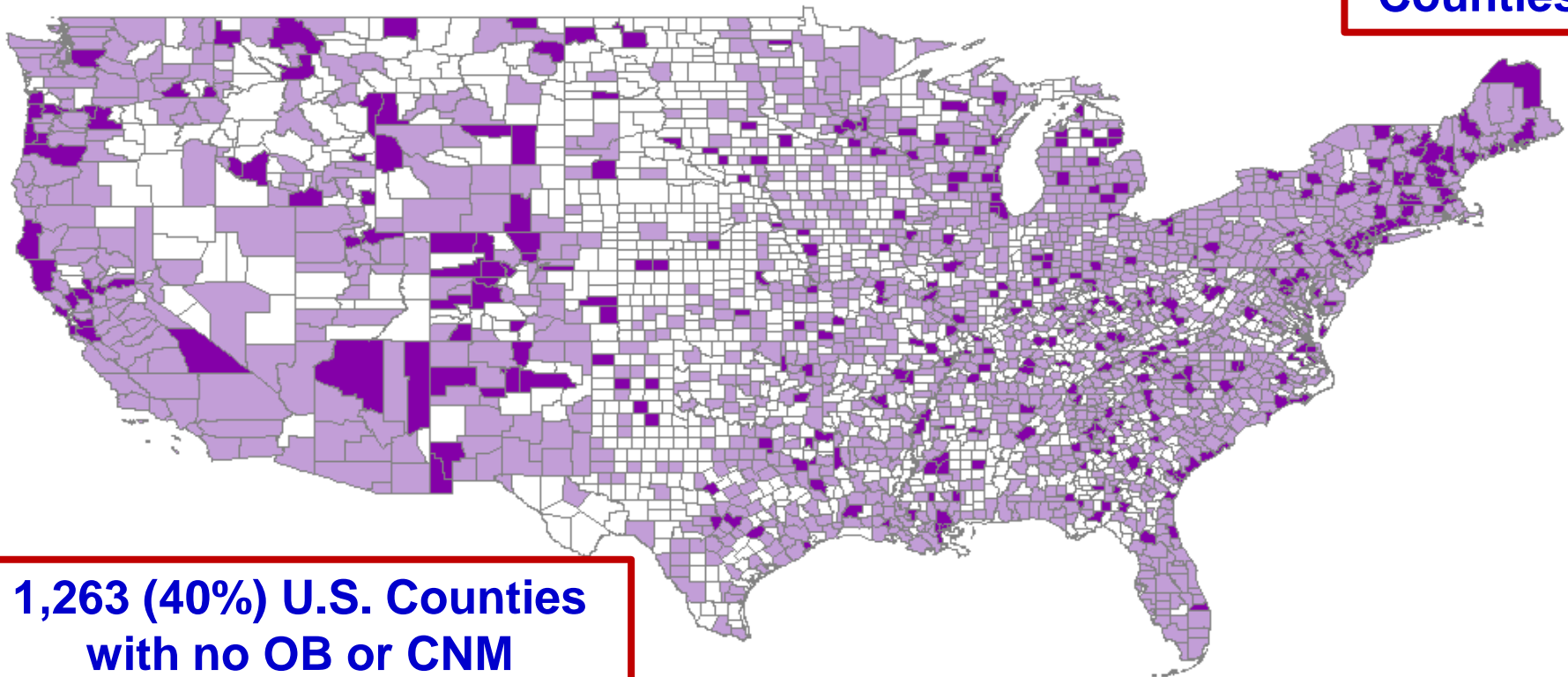


Map Created By: Kate Crawford on 3/1/2014
Birth By The Numbers (www.birthbythenumbers.org)

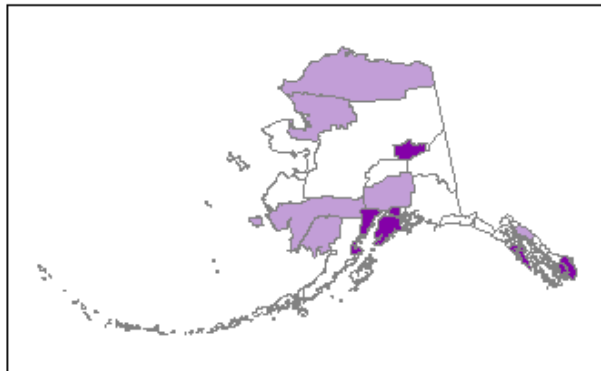
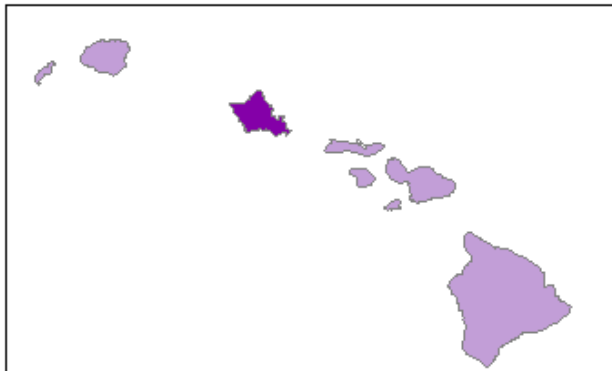
SOURCE: Area Resource File

CNMs & OBs per 100K, 2011

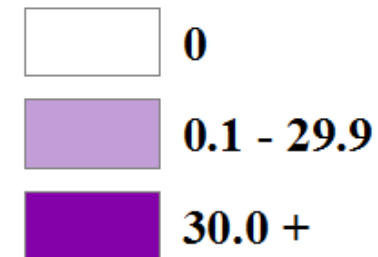
3,142
U.S.
Counties



1,263 (40%) U.S. Counties
with no OB or CNM



OBGYN & CNM per 100,000



Map Created By: Kate Crawford on 3/1/2014
Birth By The Numbers (www.birthbythenumbers.org)

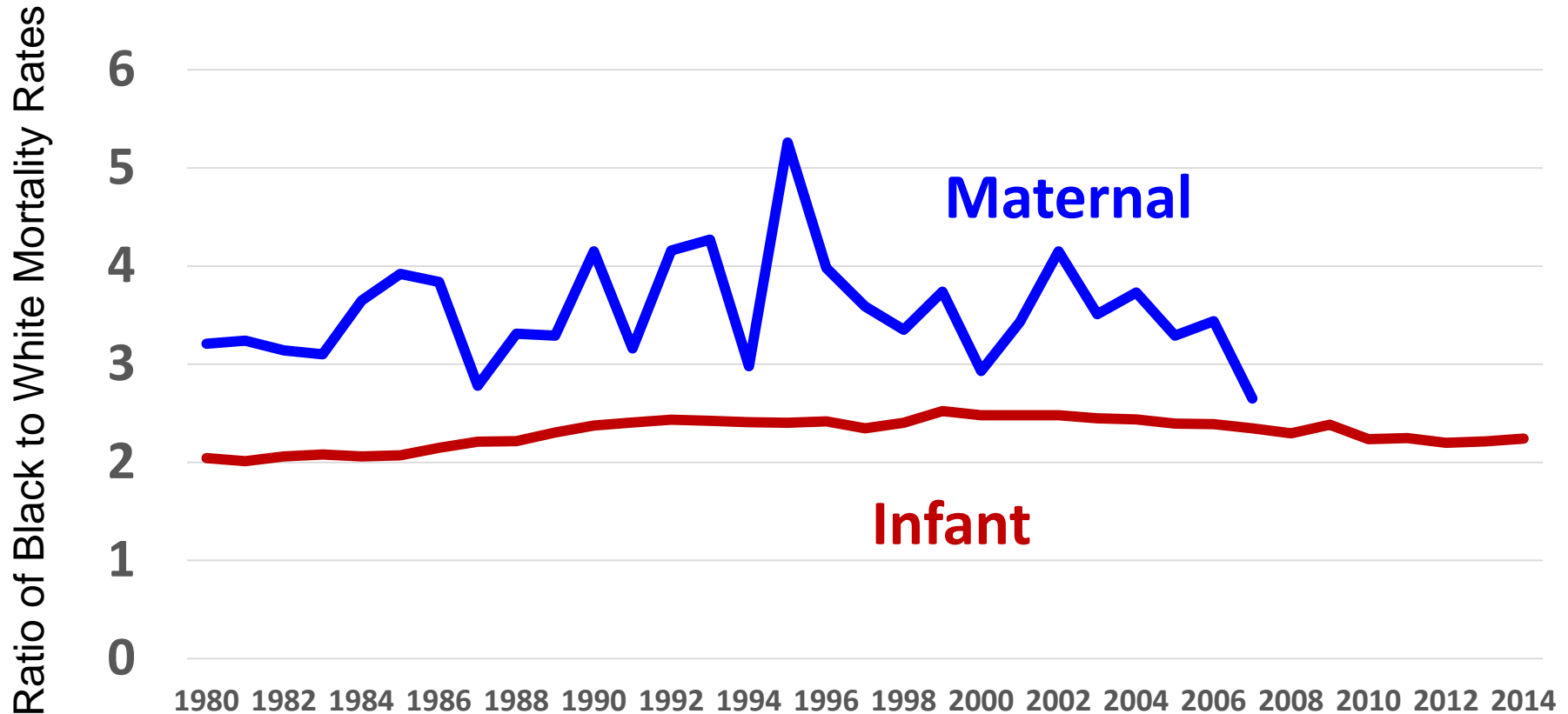
SOURCE: Area Resource File

**3. We have wide
black/white
disparities in
outcomes in the U.S.**

Wide disparities in outcomes in the U.S.

U.S. Infant & Maternal Mortality

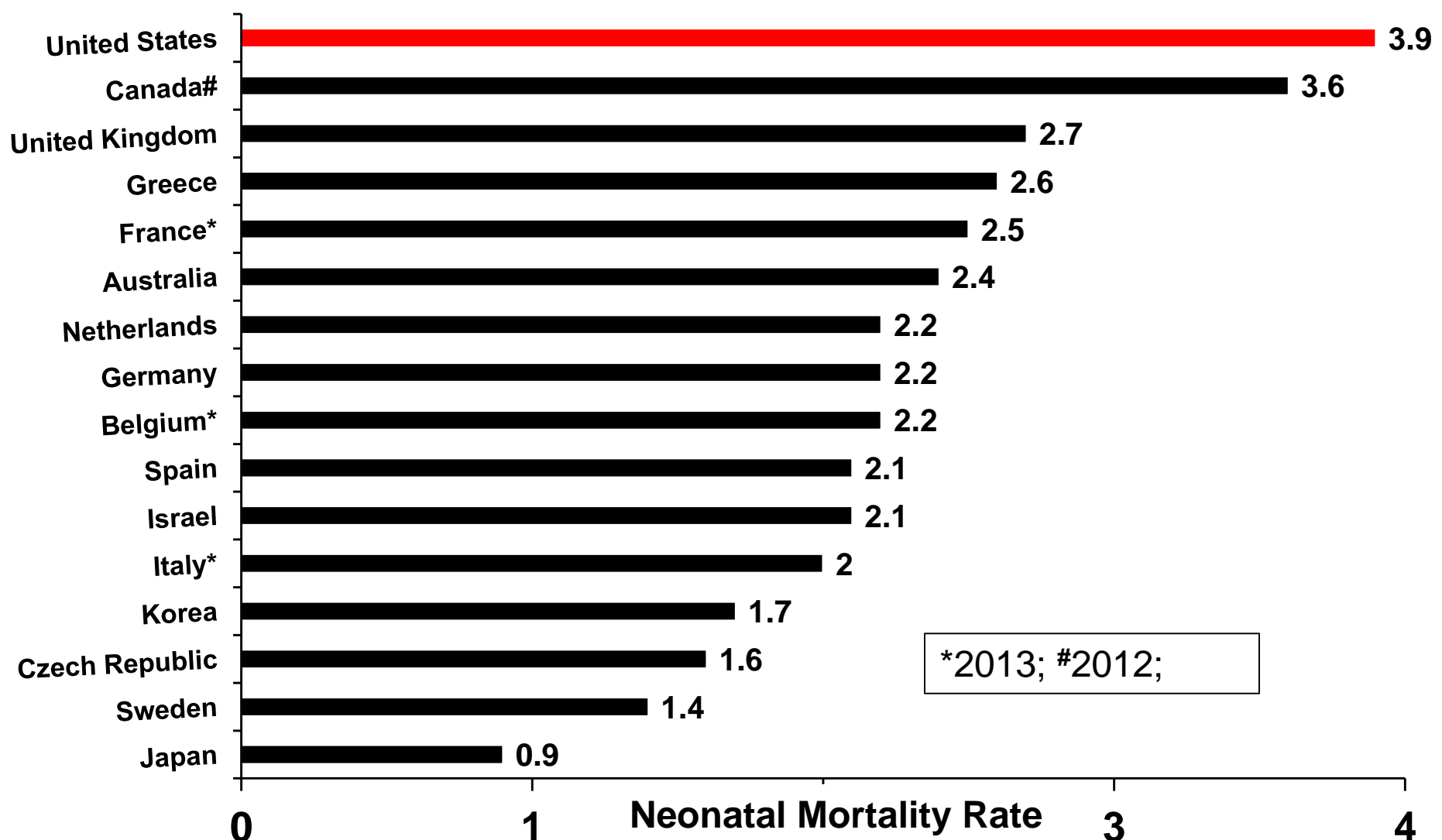
Black/White Ratios 1980-2014



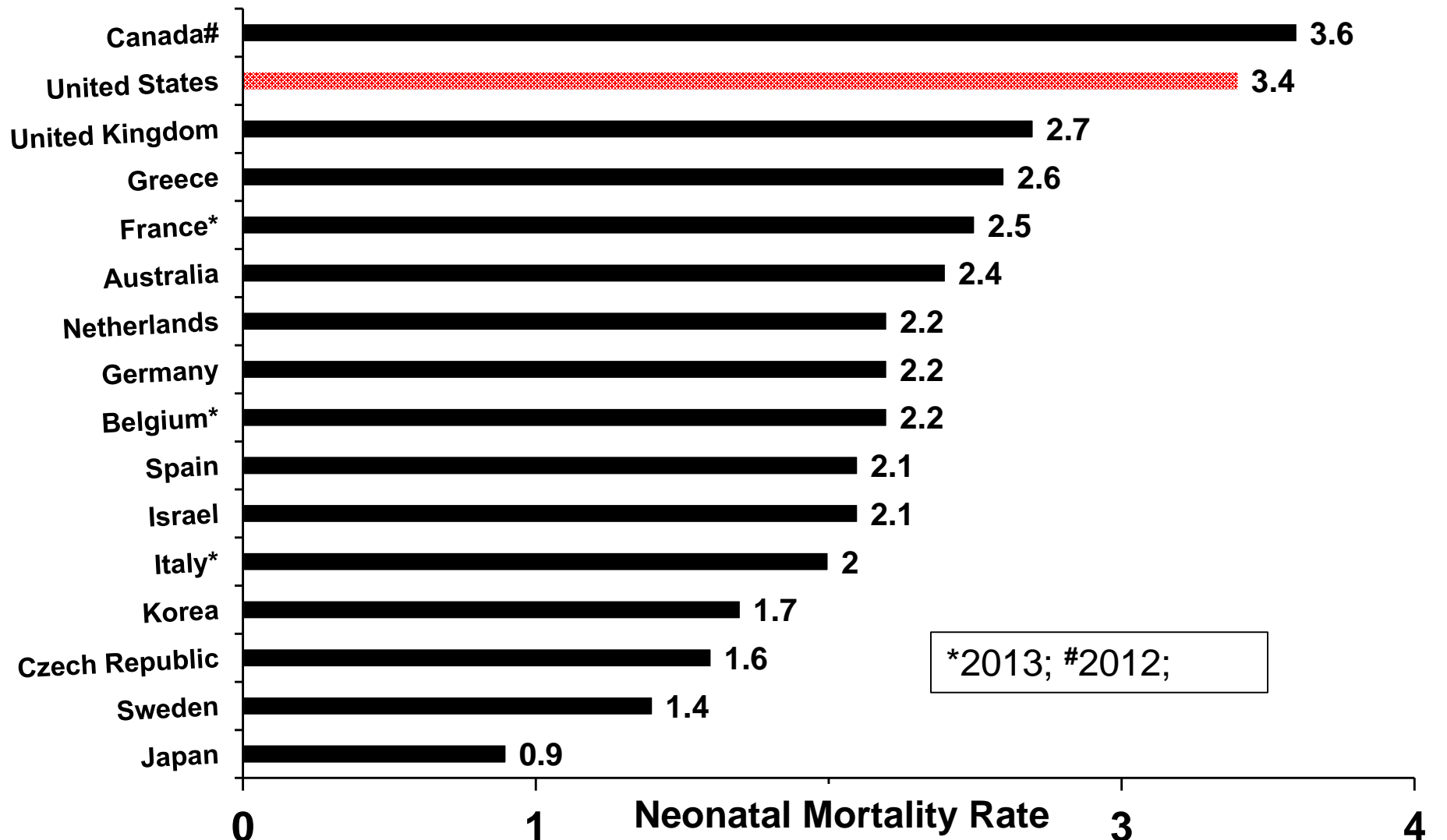
But....

**(3a) But the disparities
cannot account for the
U.S. poor performance
compared to other
countries**

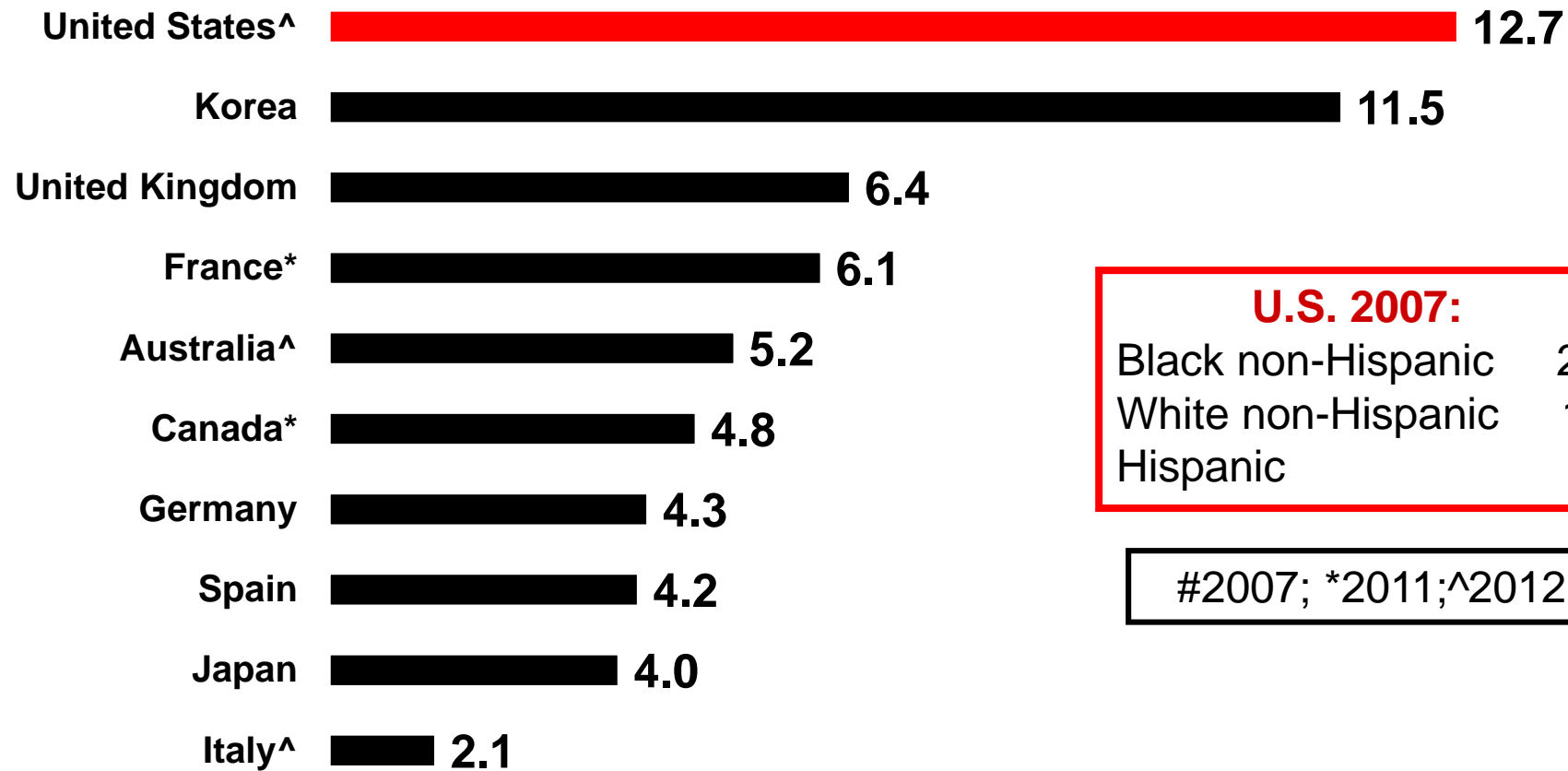
Neonatal Mortality Rates (per 1,000 births), 2014, Industrialized Countries with 100,000+ Births



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



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



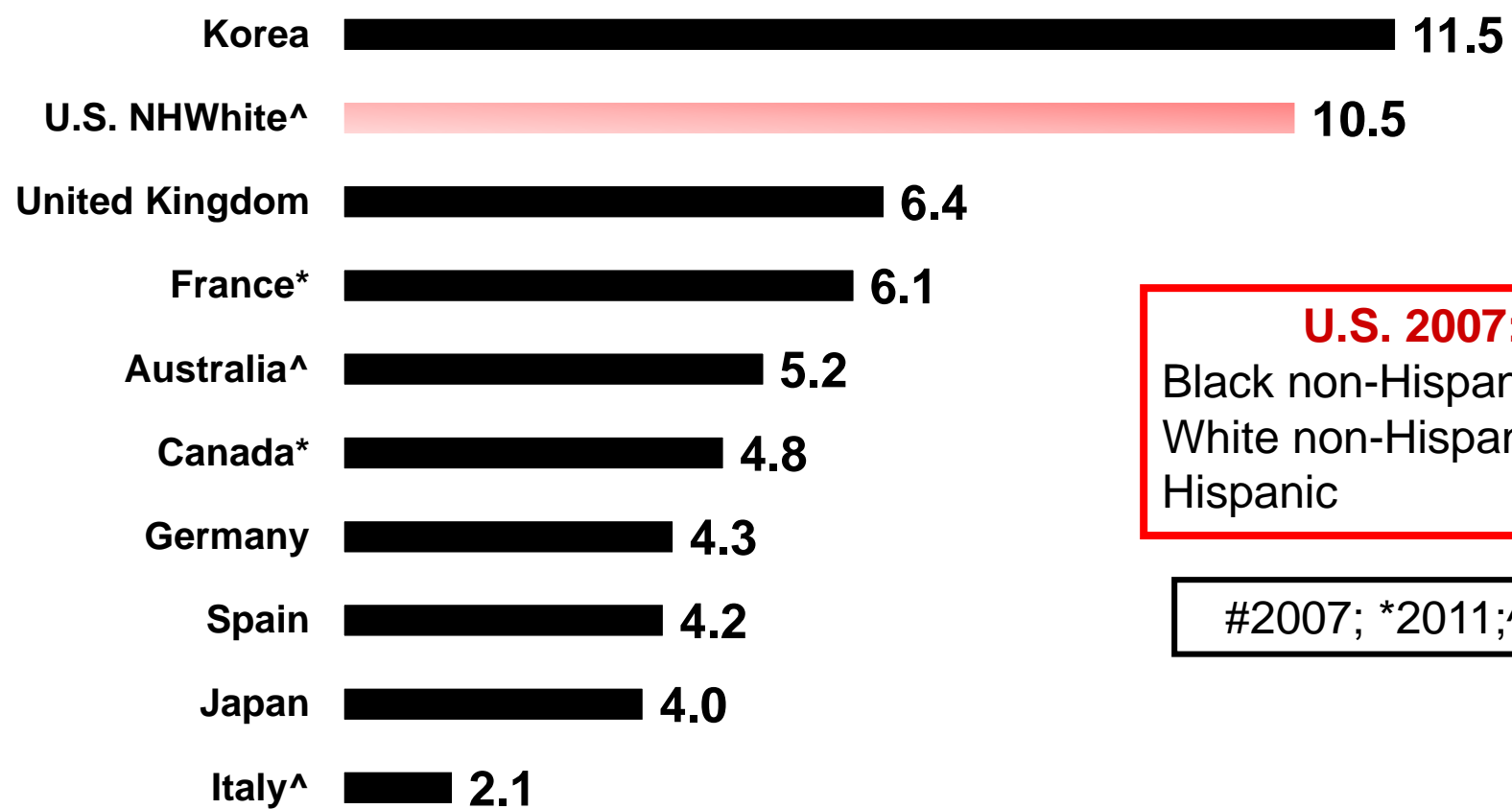
U.S. 2007:	
Black non-Hispanic	28.4
White non-Hispanic	10.5
Hispanic	8.9

#2007; *2011; ^2012

Maternal Mortality Ratio

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

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



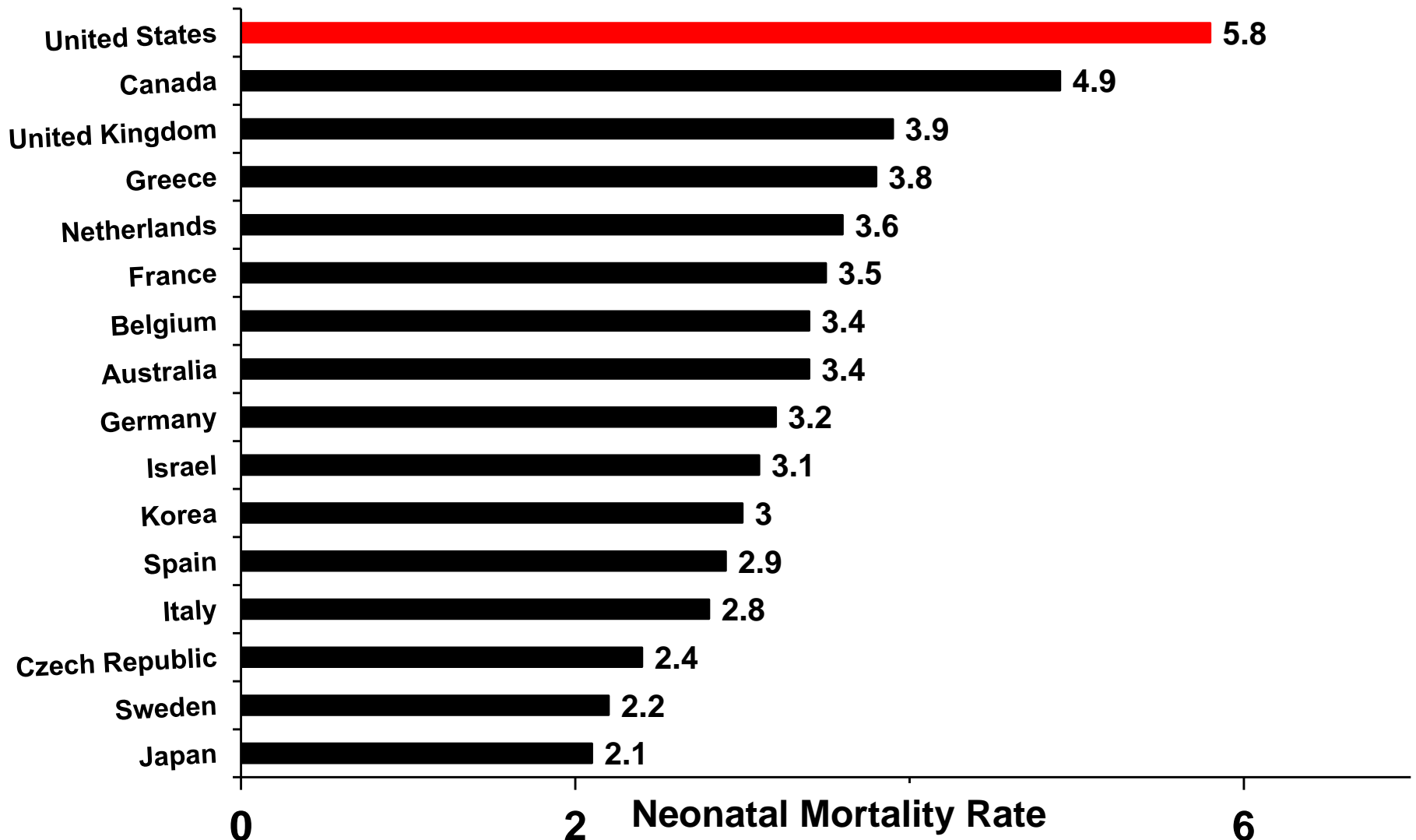
U.S. 2007:	
Black non-Hispanic	28.4
White non-Hispanic	10.5
Hispanic	8.9

#2007; *2011; ^2012

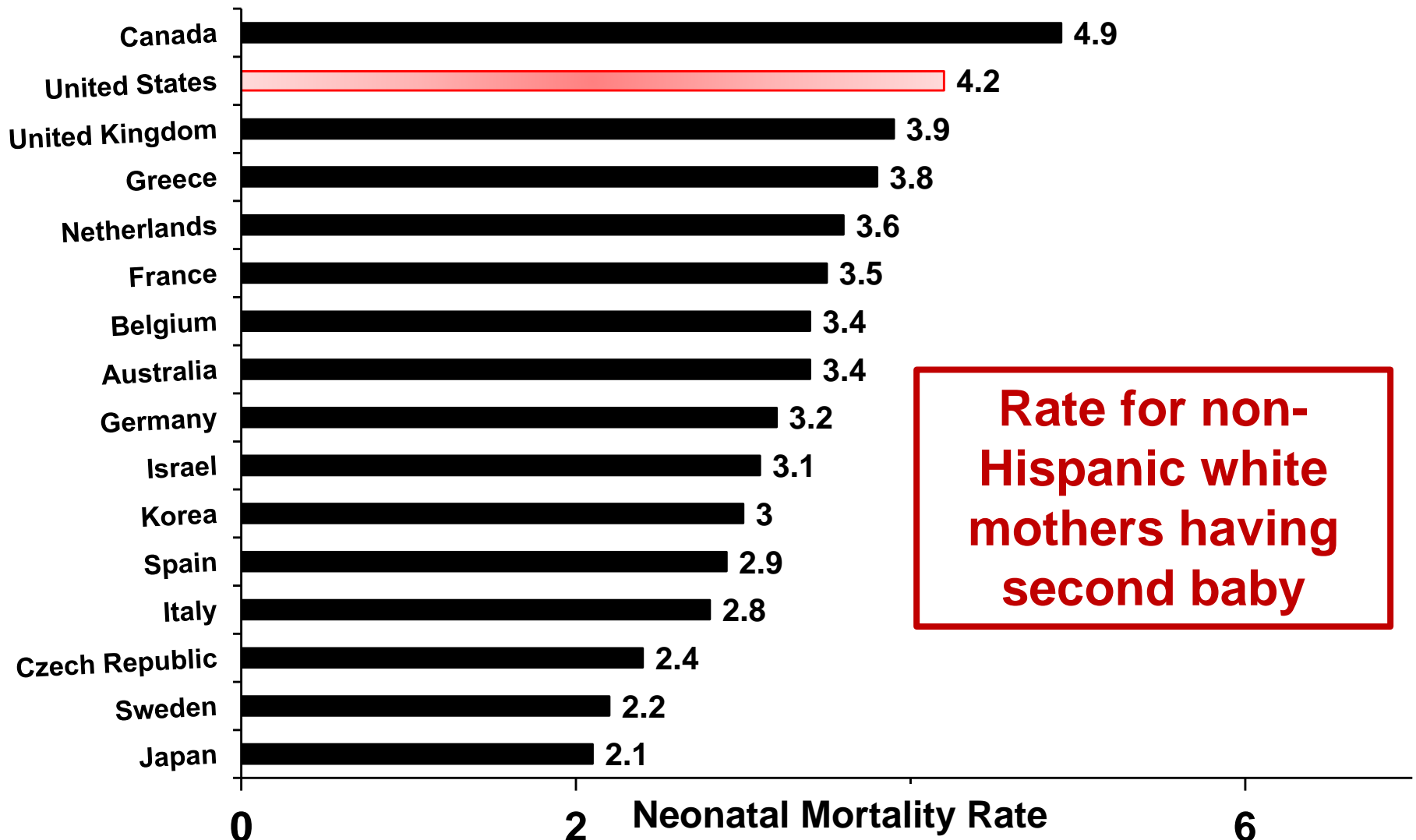
Maternal Mortality Ratio

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

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



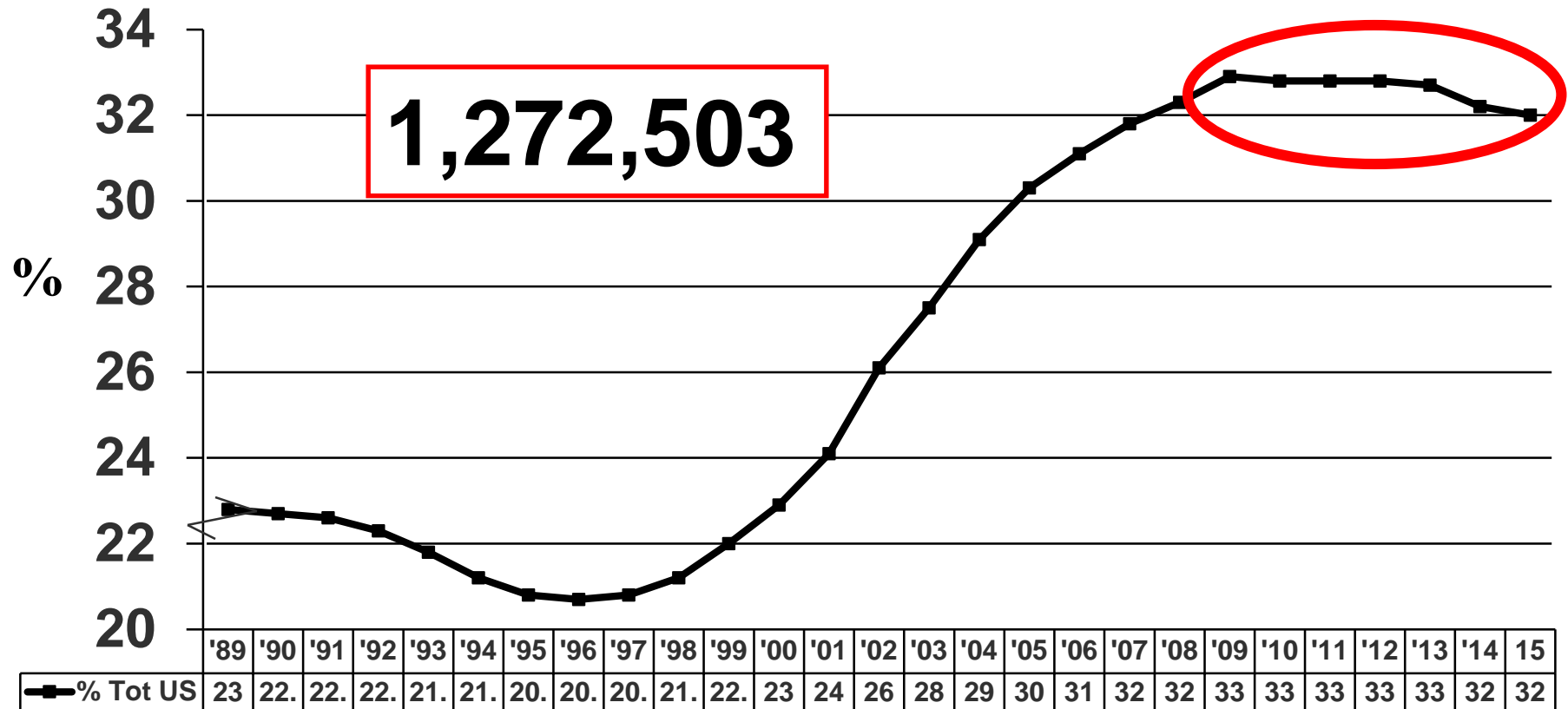
Infant Mortality Rates (per 1,000 births), 2014, Industrialized Countries with 100,000+ Births



Rate for non-Hispanic white mothers having second baby

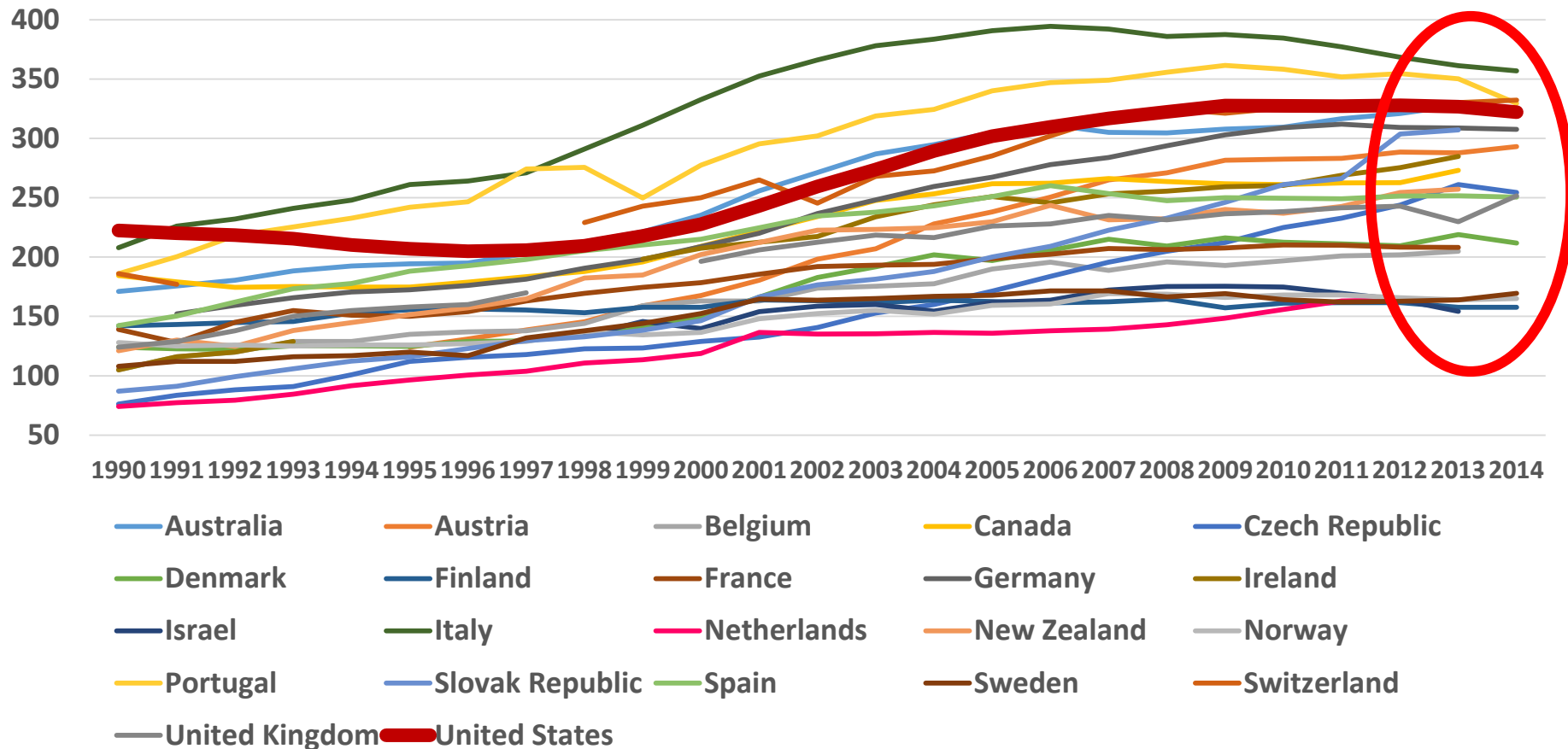
4. Cesarean Rates have leveled in the US

US Cesarean Rates, 1989-2015



.....And in the Industrialized World

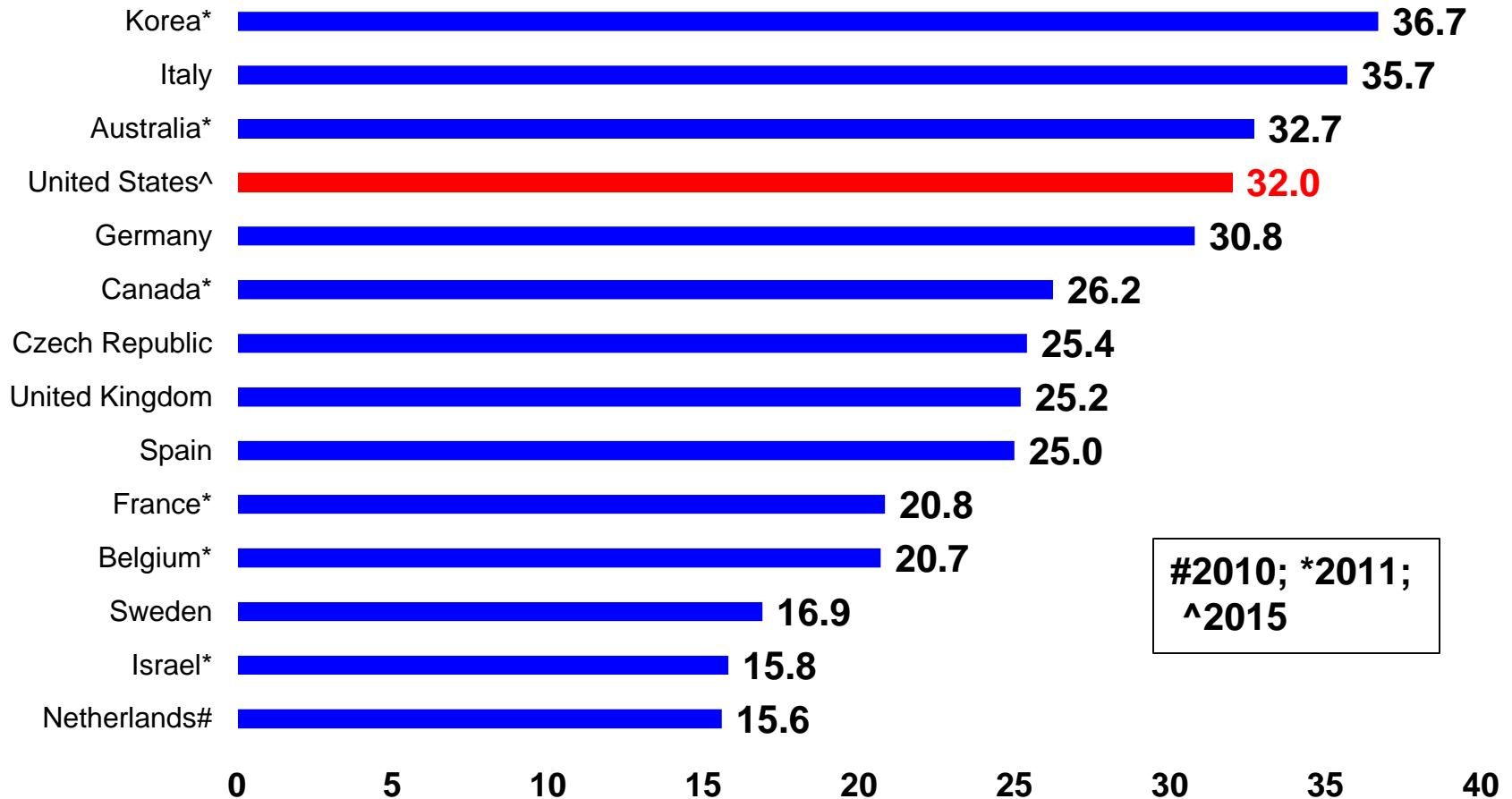
Trends in Overall Cesarean Rate (per 1,000) 1990 – 2014



Most all country rates have plateaued, but at widely different levels.

Source: OECD Health Data 2016; WHO Health for All Database; Country reports

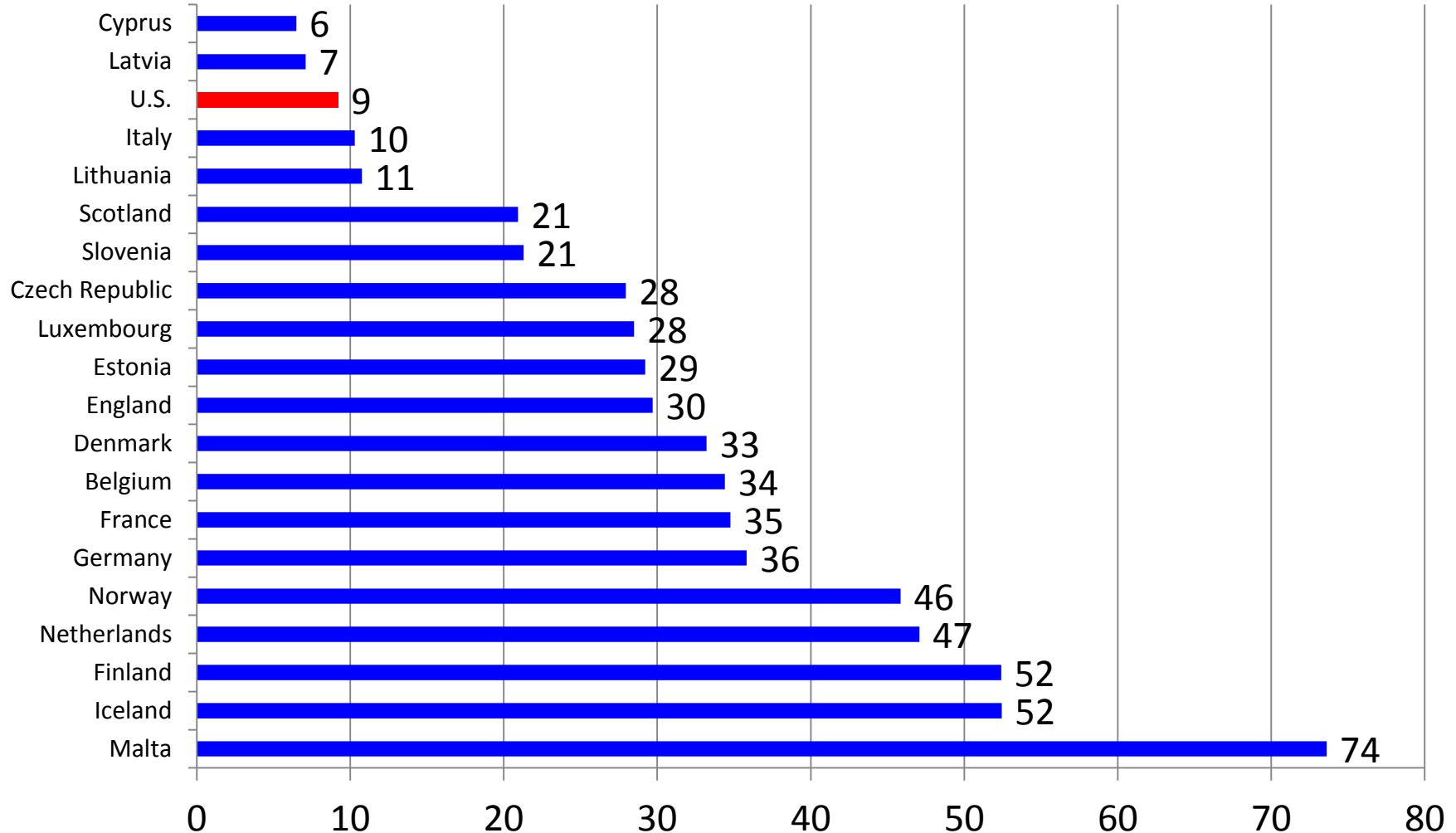
Cesarean Rates (%) in Industrialized Countries* with 100,000+ Births, 2014



* No data on cesarean rates in Greece and Japan

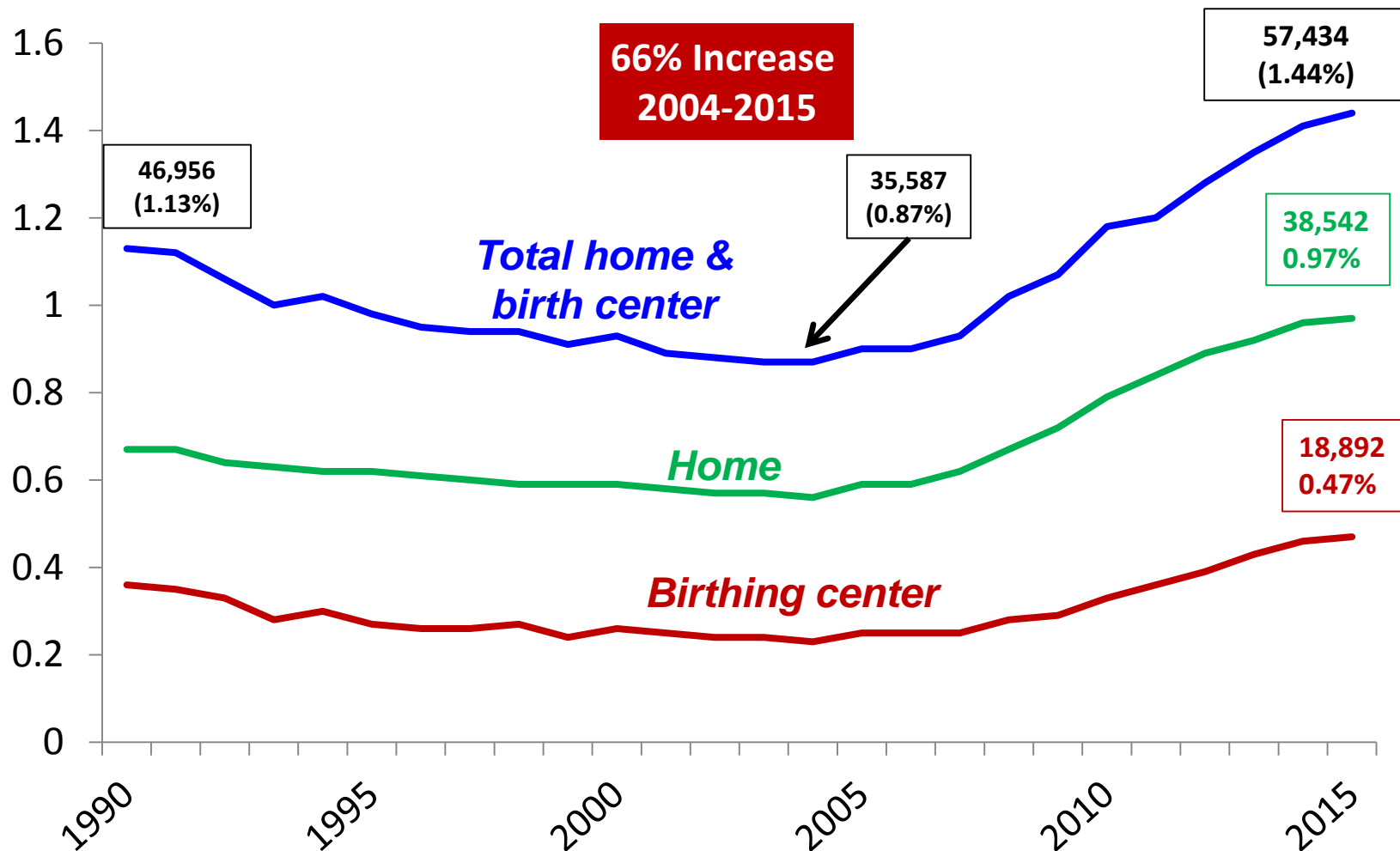
Vaginal Births after Cesraean Rates

Industrialized Countries, 2010



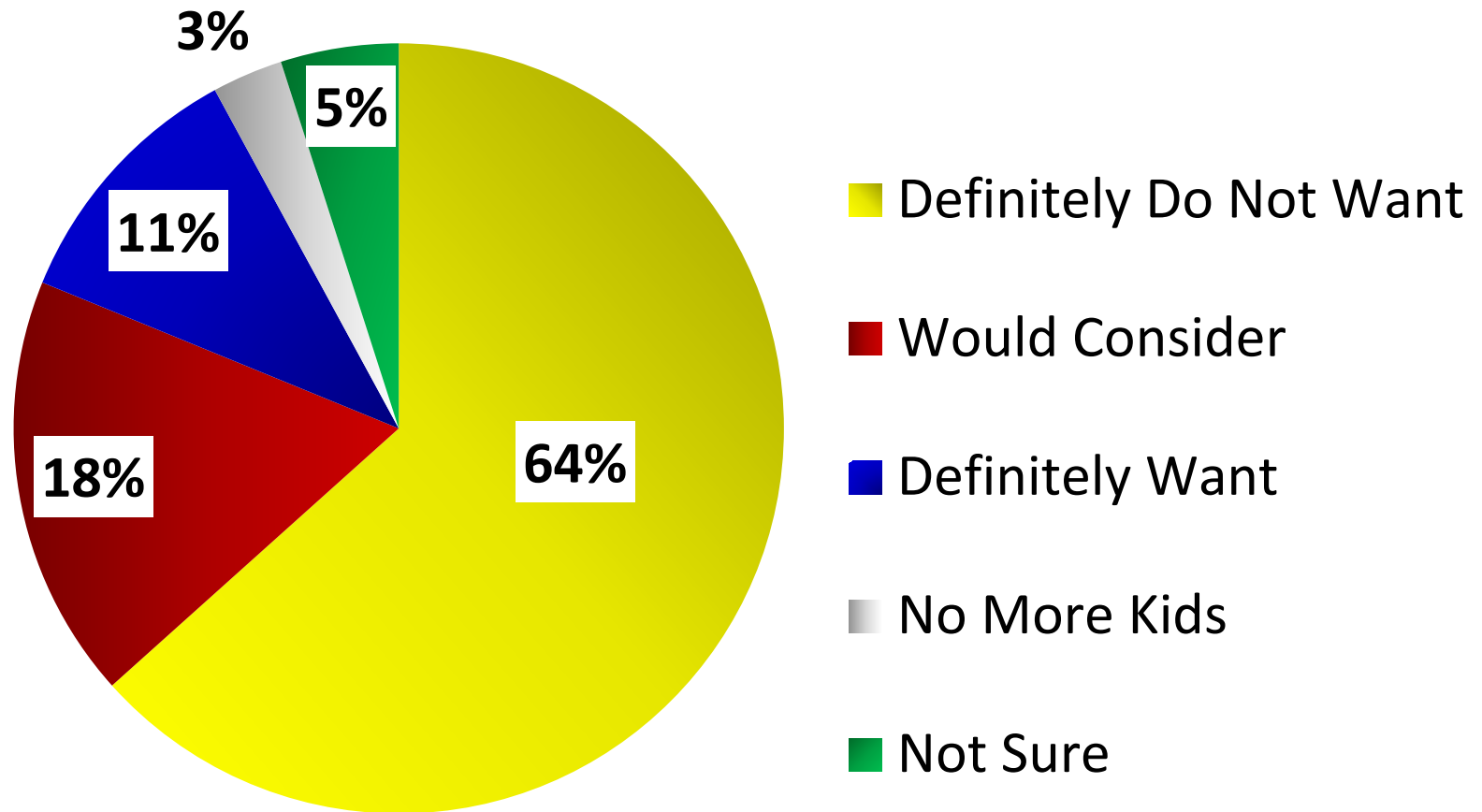
**5. A subset of women
are voting with their feet
against the current
system.**

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

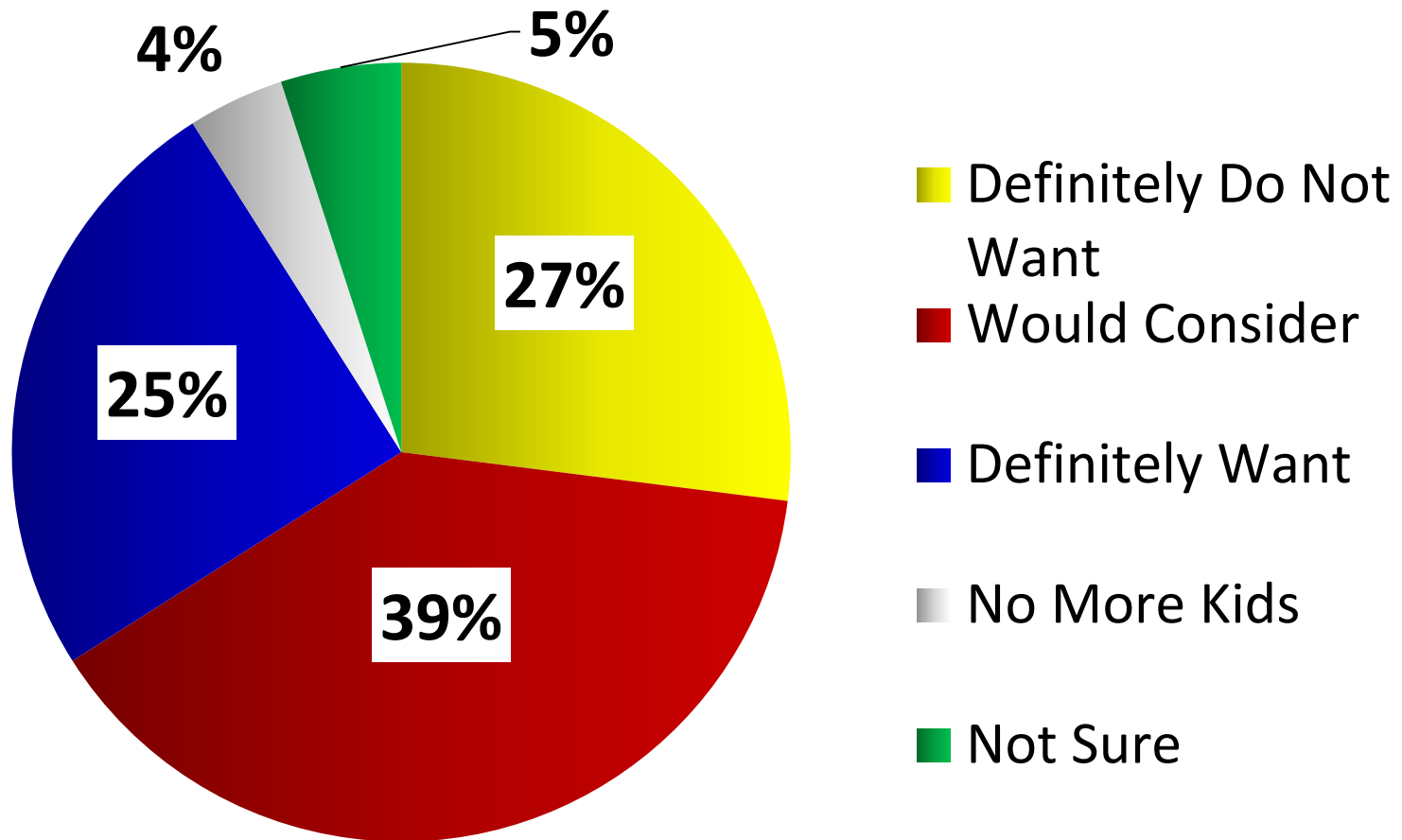


Source: NCHS Annual Birth Reports & CDCVitalStats. <http://www.cdc.gov/nchs/nvss.htm>

*For any future births, how open would you be to giving birth at **home**?*



For any future births, how open would you be to giving birth at a **birth center** that is separate from a hospital?



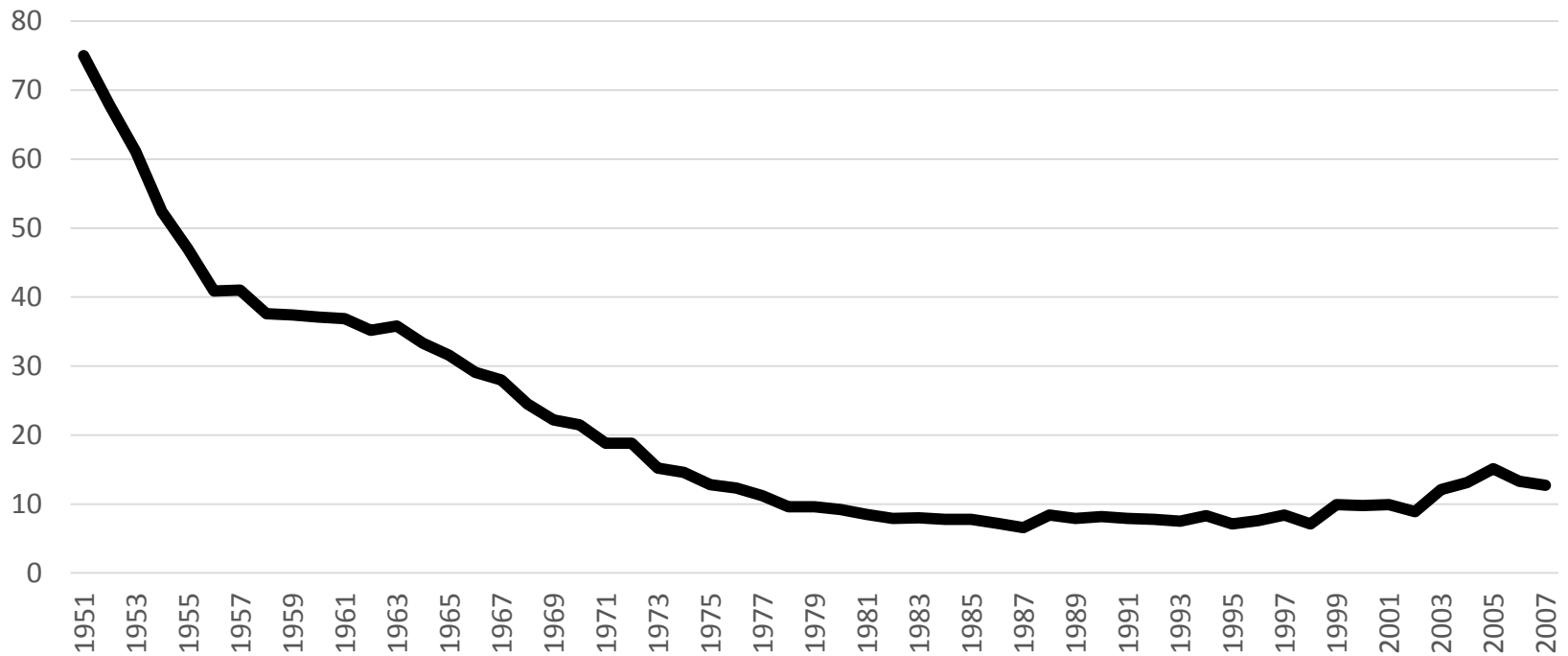
**This is a time of notable
transition in childbirth in
the U.S. and
internationally.....**

**...and too many women
are dying in childbirth**

Definitions

- **Maternal Mortality Ratio** – the death of a woman *while pregnant or within 42 days of termination of pregnancy*, irrespective of the duration and site of the pregnancy, from any cause *related to or aggravated by the pregnancy* or its management but not from accidental or incidental causes. Typically reported as a ratio per 100,000 births.
- **Pregnancy Related Death** – the death of a woman during pregnancy or *within one year* of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.
- **Pregnancy Associated Death** – The death of a women while pregnant or *within one year* of termination of pregnancy, *irrespective of cause*.

U.S. Maternal Mortality (per 100,000 live births), 1951-2007



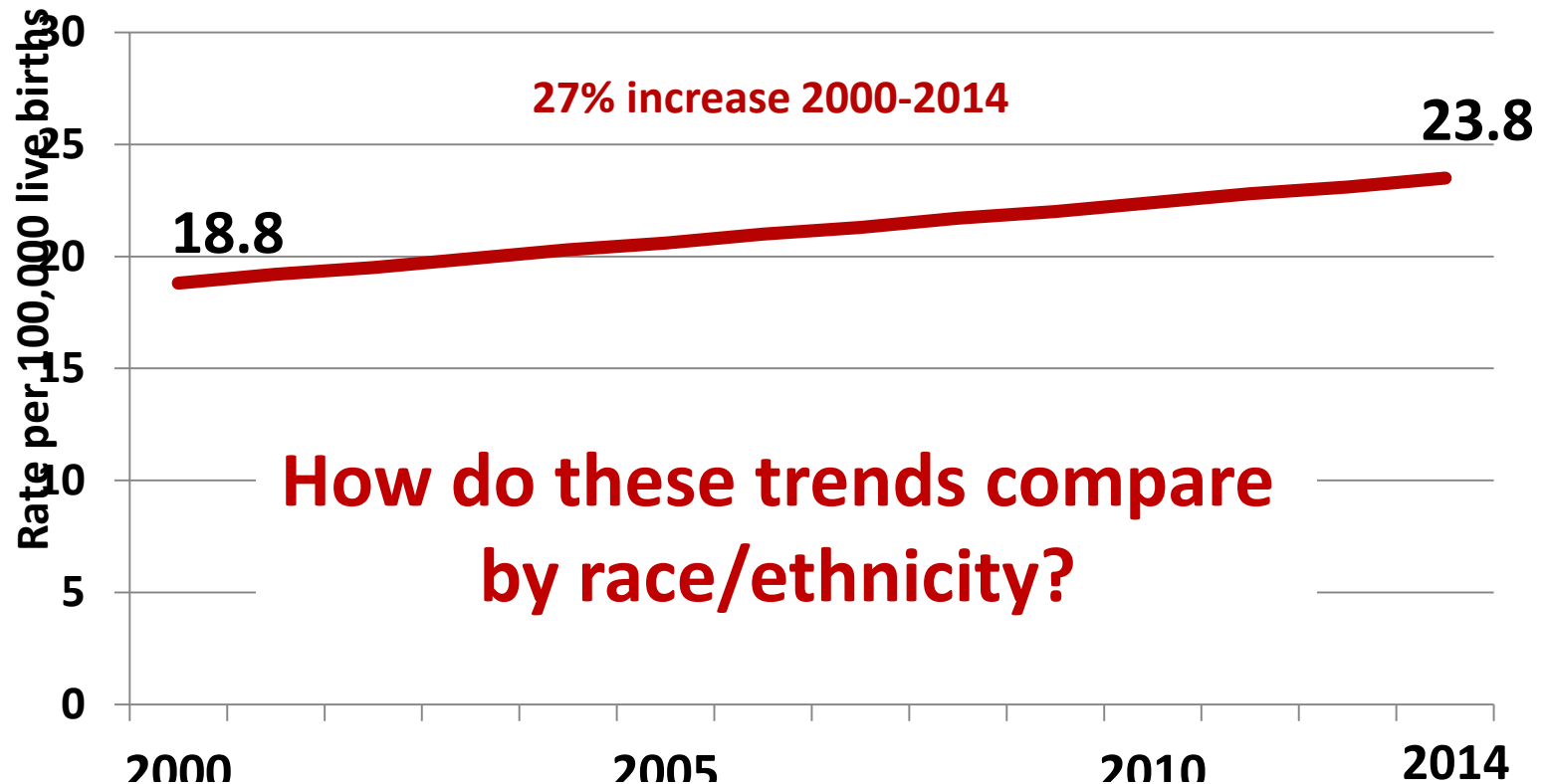
Recent Increases in the U.S. Maternal Mortality Rate

Disentangling Trends From Measurement Issues

Marian F. MacDorman, PhD, Eugene Declercq, PhD, Howard Cabral, PhD, and Christine Morton, PhD

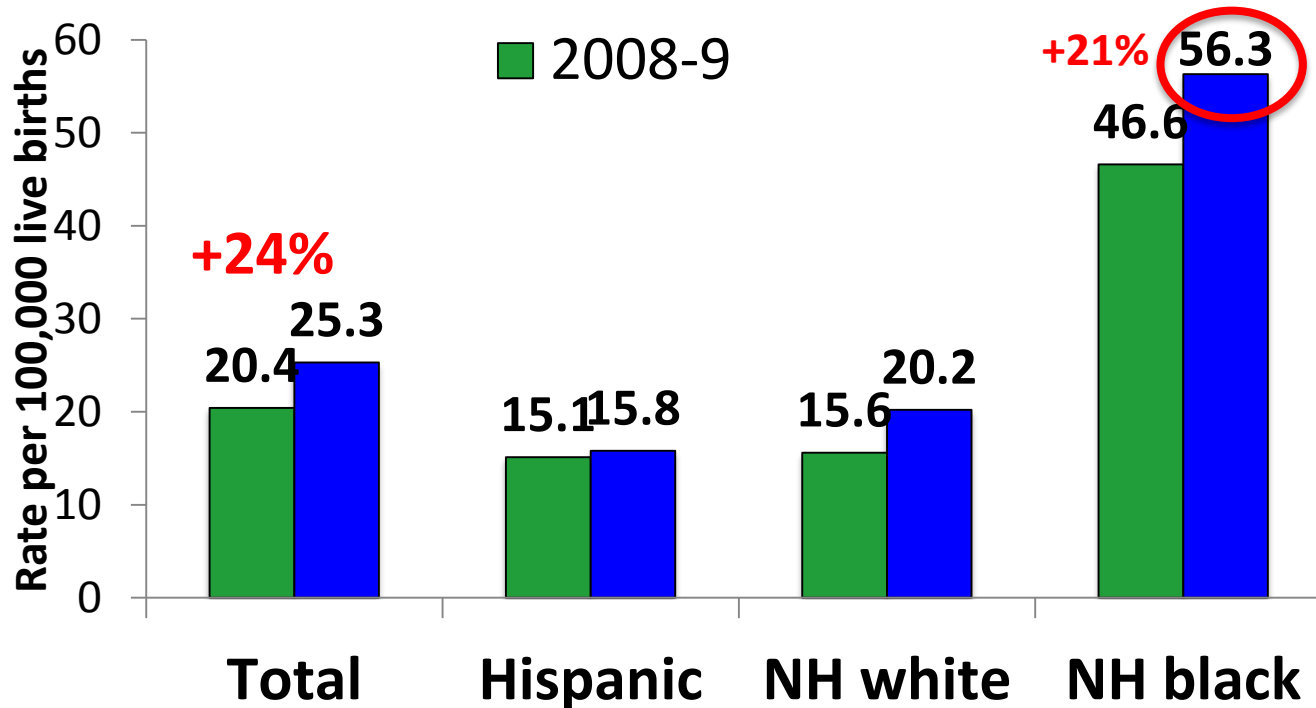
RESULTS: The estimated maternal mortality rate (per 100,000 live births) for 48 states and Washington, DC (excluding California and Texas, analyzed separately) increased by 26.6%, from 18.8 in 2000 to 23.8 in 2014. California showed a declining trend, whereas Texas had a sudden increase in 2011–2012. Analysis of the measurement change suggests that U.S. rates in the early 2000s were higher than previously reported.

Estimated MMRs, 48 states* and DC, 2000-2014



*Excludes California and Texas.

Maternal mortality rates by race and ethnicity, **27 states*** and Washington D.C., 2008-9 and 2013-14



NH = non-Hispanic. n.s. = no significant change.

* Arkansas, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Michigan, Montana Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Utah, Washington, and Wyoming.

Interracial Differences

Where would estimated rates leave the U.S. in international comparisons?

Hispanic 15.8 (Lebanon 15/Turkey 16)

Sources: MacDorman et al, 2017; *Maternal Mortality: 1990 to 2015* Estimates by WHO, UNICEF, UNFPA, World Bank Group & UN Population Division. Geneva: 2015.

Interracial Differences

Where would estimated rates leave the U.S. in international comparisons?

Hispanic 15.8 (Lebanon 15/Turkey 16)

NH White 20.2 (Thailand 20/Chile 22)

Interracial Differences

Where would estimated rates leave the U.S. in international comparisons?

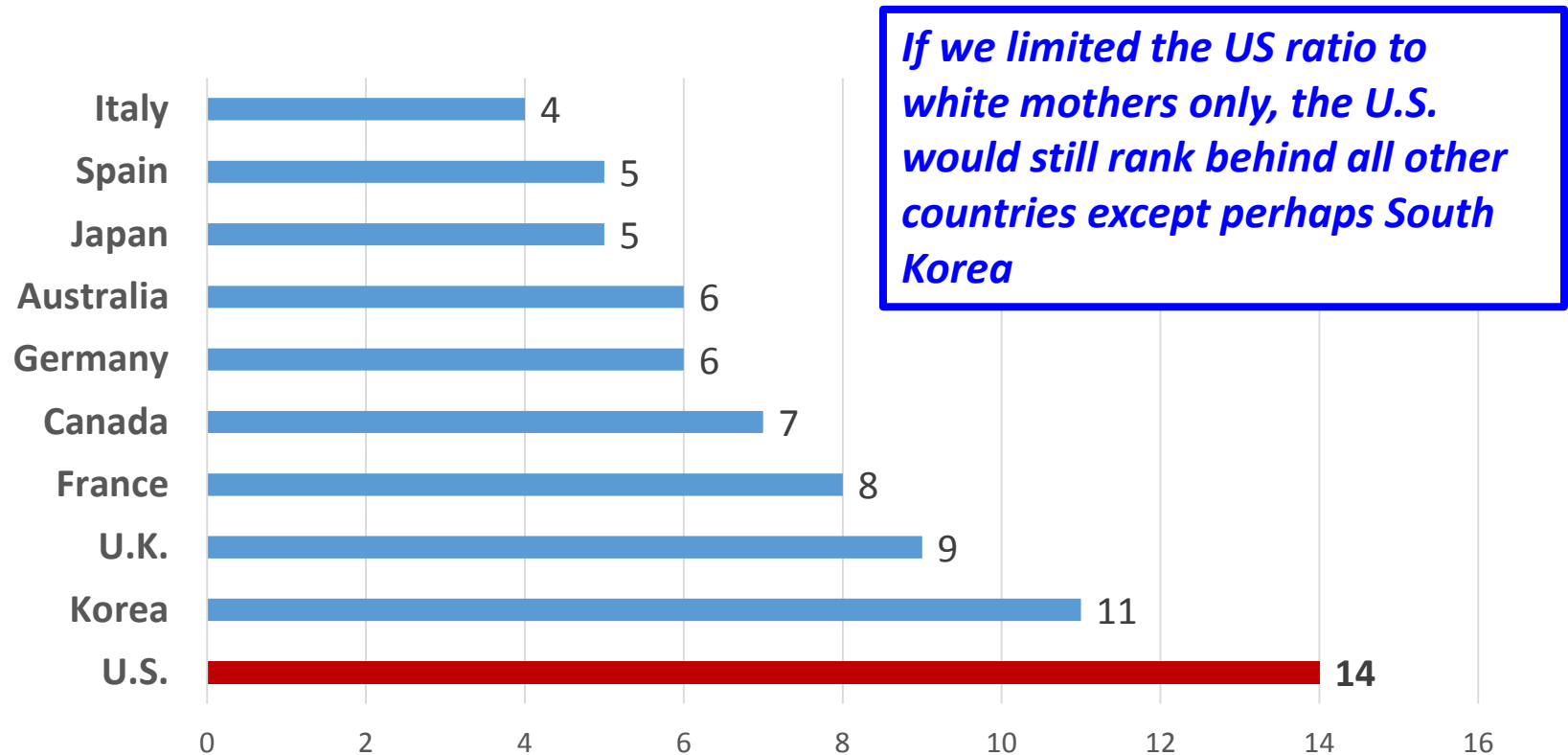
Hispanic 15.8 (Lebanon 15/Turkey 16)

NH White 20.2 (Thailand 20/Chile 22)

NH Black 56.3 (Vietnam 56/Jordan 58)

Sources: MacDorman et al, 2017; *Maternal Mortality: 1990 to 2015* Estimates by WHO, UNICEF, UNFPA, World Bank Group & UN Population Division. Geneva: 2015.

U.S. MMR* Compared to Countries with 300,000+ births, 2014, using WHO Estimates



* Maternal Mortality per 100,000 births

Source: *Maternal Mortality: 1990 to 2015* Estimates by WHO, UNICEF, UNFPA, World Bank Group & UN Population Division. Geneva: 2015.

**Is this of interest to
journalists?**

Texas Maternal Mortality Rate Soars

Local health department examining deaths: Is the Lege to blame?

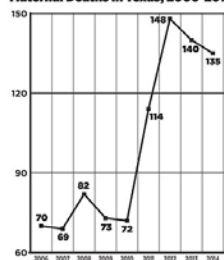
BY MARY TUMA, FRI., SEPT. 9, 2016

Share 342 Tweet 10 Like 0 Print Write a letter

Two recently released back-to-back studies showing unusual jumps in maternal deaths in Texas are drawing concern over women's health, and moving the local health department to examine its own figures on mortality rates.

One study, published by researchers from Boston University, the University of Maryland, and Stanford, found that after 2010, the maternal mortality rate in Texas doubled within a two-year period to "levels not seen in other U.S. states." (Maternal mortality is a pregnancy-related death from causes related to the pregnancy, excluding accidental or incidental causes.) In 2010 the rate was 16.6 per 100,000 live births, but by 2013 that jumped to 36.1. Comparatively, the U.S. maternal mortality rate was 23.8 deaths per 100,000 births in 2014 (excluding California and Texas). The steep rise is difficult to explain in "the absence of war, natural disaster, or severe economic upheaval," researchers concluded.

Maternal Deaths in Texas, 2006-2014



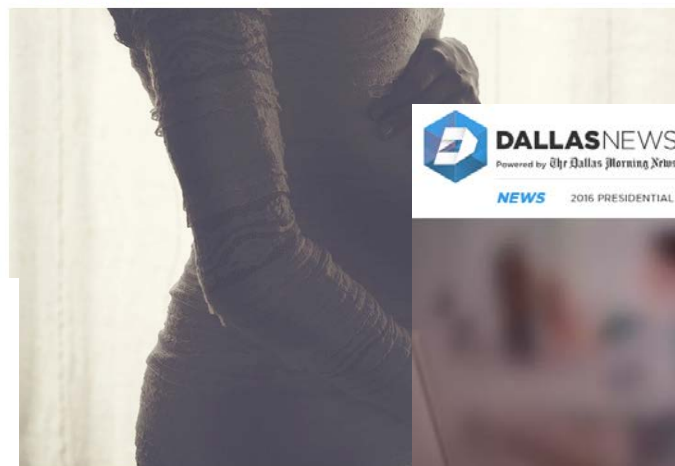
Research shows Texas maternal deaths jumped sharply after 2010, doubling within a two-year period to "levels not seen in other U.S. states."

(Source: "Recent Increases in the U.S. Maternal Mortality Rate")

More New Mothers in Texas are Dying; Experts Can't Say Why

Two recent studies have highlighted the increasing rate of maternal deaths in Texas, but researchers say they can't explain why it's happening.

BY EDGAR WALTERS SEPT. 4, 2016 12:01 AM



DALLASNEWS
Powered by Qhr Dallas Morning News

NEWS 2016 PRESIDENTIAL ELECTION POLITICS CRIME EDUCATION INVESTIGATIONS TEXAS

Health

Study: Rate of maternal mortality doubles in Texas

State report narrows down causes

By: Stephanie Valle

Posted: Nov 02, 2016 06:02 PM MDT

Updated: Nov 02, 2016 11:09 PM MDT



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WHAT TEXAS IS TALKING ABOUT TODAY

Texit Forces Welcomed At A Russian Separatist... Truth and Fiction on the Horizon

The State of Texas: Data On Skyrocketing Maternal Mortality Rate Remains Secret

PLUS: A TEXAS COP GETS INDICTED FOR BEATING A MAN WITH A BATON, DEZ BRYANT ADDS HIMSELF TO THE LIST OF TEXAS' INJURED NFL STARS, AND A HOUSTON NIGHTCLUB GETS SUED BY THE FEDS FOR ALLEGED DISCRIMINATION.

SEPTEMBER 29, 2016 | BY LEIF REIGSTAD | 0 COMMENTS



EDITORIALS SEPTEMBER 6, 2016 5:58 PM

Texas must learn more about maternal deaths

TEXAS LEGISLATURE SEP 28

Reasons for Texas' surge in pregnancy-related deaths cloaked in secrecy, bad data

David McSwane and Terri Langford

Why all the media coverage?

The NEW ENGLAND JOURNAL *of* MEDICINE

SPECIAL ARTICLE

Effect of Removal of Planned Parenthood from the Texas Women's Health Program

Amanda J. Stevenson, M.A., Imelda M. Flores-Vazquez, Ph.D.,
Richard L. Allgeyer, Ph.D., Pete Schenckan, J.D., and Joseph E. Potter, Ph.D.

N ENGL J MED 374;9 NEJM.ORG MARCH 3, 2016

CONCLUSIONS

The exclusion of Planned Parenthood affiliates from a state-funded replacement for a Medicaid fee-for-service program in Texas was associated with adverse changes in the provision of contraception.

**Texas was a possible story, but
the study couldn't determine
that.**

**What's lost is the ongoing
problems with maternal
mortality both in terms of
disparities and the overall poor
outcomes in the U.S.**

Possible Stories

- **Maternal mortality**
 - Positive efforts in California
 - The Hispanic paradox and maternal mortality
 - Possible impacts of cuts to women's health services
- **Success of efforts to limit growth in cesareans**
 - what's next?
- **Maldistribution of OBs and midwives in the U.S.**
- **Rise of home and birth center births and efforts to curtail them**

www.birthbythenumbers.org



Birth by the Numbers Team

8 doulas



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Email: birthbynumbers@gmail.com



**Questions and
Comments?**

**Gene Declercq
declercq@bu.edu**