

BURDEN OF MATERNAL MORBIDITY AND MORTALITY: DATA

NASEM WORKSHOP ON ADVANCING MATERNAL HEALTH EQUITY AND REDUCING MATERNAL MORTALITY

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Disclosures

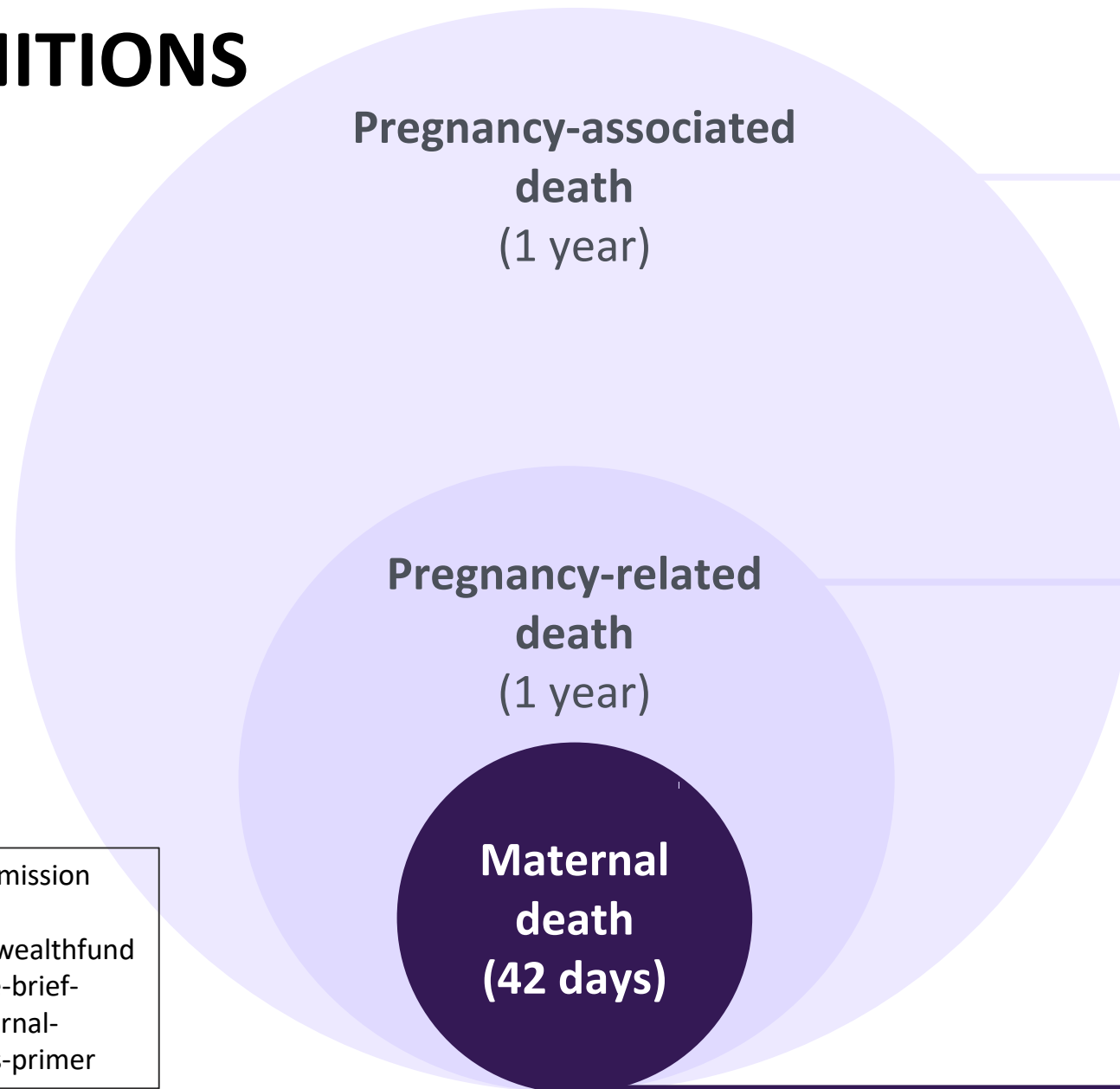
I, Dr. Wanda Barfield, have no relationships with any commercial interests that would represent a conflict of interest with the educational presentation that follows.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

MEASURING MATERNAL MORTALITY

NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

DEFINITIONS



Pregnancy-associated death:

Death during or within 1 year of pregnancy, regardless of the cause

Pregnancy-related death:

Death during or within 1 year 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

Maternal death:

Death of a women while pregnant or within 42 days of termination of pregnancy, regardless of the duration or site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental causes

Slide adapted with permission
from Eugene Declercq
<https://www.commonwealthfund.org/publications/issue-brief-report/2020/dec/maternal-mortality-united-states-primer>

Data from three important sources

National Vital Statistics System	Pregnancy Mortality Surveillance System	Maternal Mortality Review Committees
<p>Reports maternal deaths during pregnancy and <u>up to 42 days after delivery</u></p>	<ul style="list-style-type: none">• Defines pregnancy-related death as during pregnancy or <u>within 1 year after pregnancy</u>• Uses death certificates, linked birth or fetal death certificates, and other information as available	<ul style="list-style-type: none">• Review <u>all deaths that occur during pregnancy or within 1 year, regardless of cause</u>• Gather data from multiple clinical and non-clinical sources to determine:<ul style="list-style-type: none">• pregnancy-relatedness,• underlying cause,• preventability,• contributing factors and• recommendations for action.

A Common Language



MATERNAL MORTALITY REVIEW
INFORMATION APP

MMRIA is a CDC data system that provides a common data language for MMRCs, facilitating their functions and promoting a national approach.

MMRIA facilitates enhanced data collection on maternal substance use, experiences of racism, social determinants of health, and more.

BURDEN OF MATERNAL MORTALITY

NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

TOO MANY MOTHERS DIE



700

- 700 women die each year in U.S. from pregnancy-related causes
- Includes during pregnancy, labor/delivery, or up to a year after the end of pregnancy

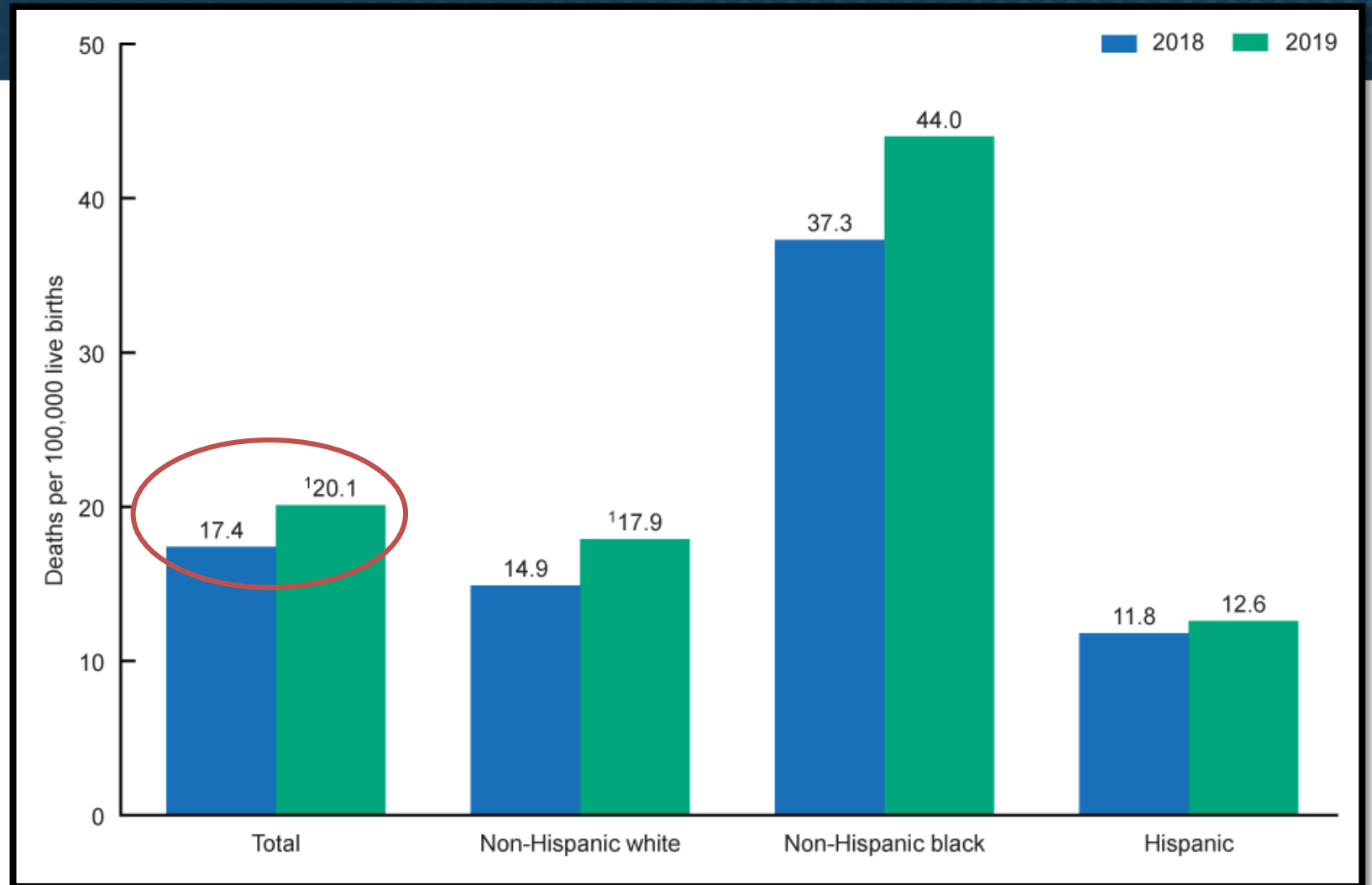
2-3X

- American Indian/ Alaskan Native 2 times more likely to die than white women
- Black women 3 times more likely to die than white women

66%

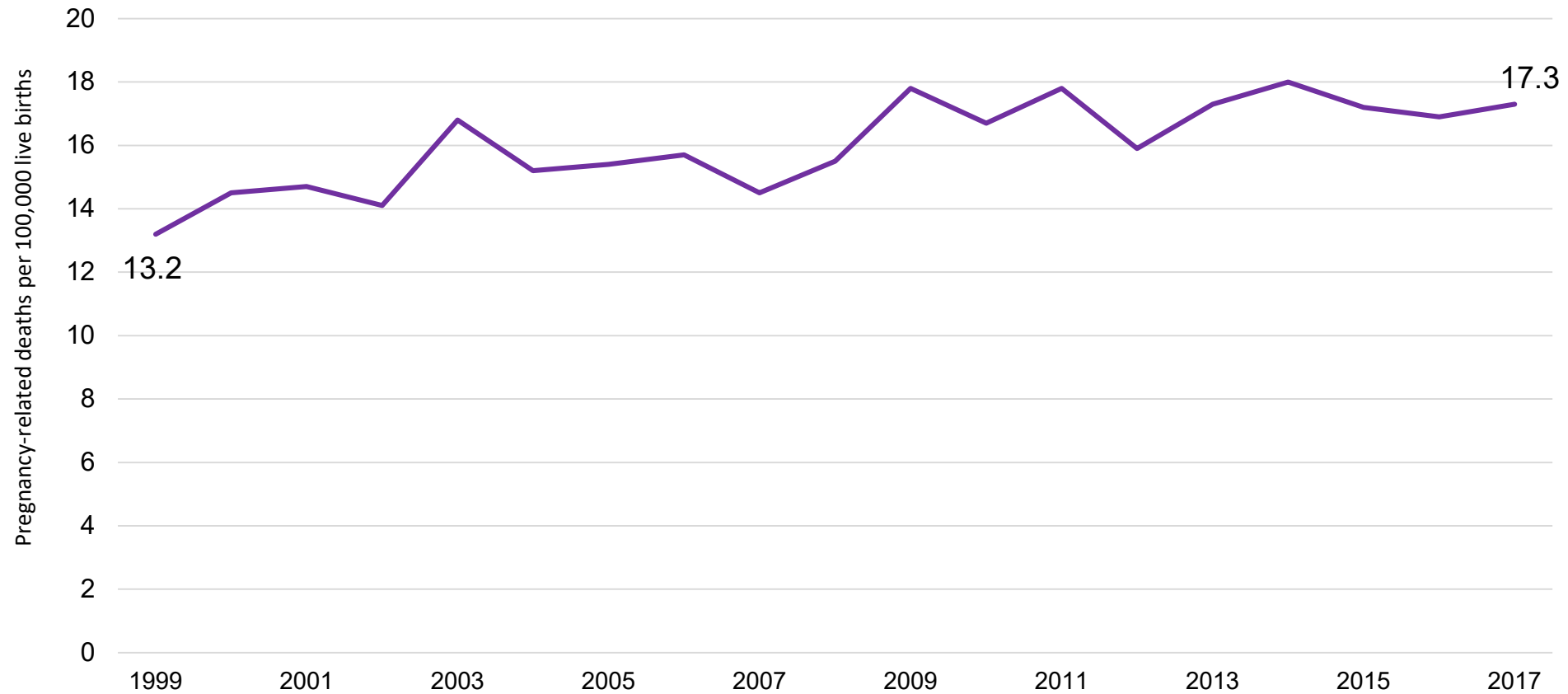
- About 66% of these deaths may be preventable
-

2019 Maternal Mortality Data



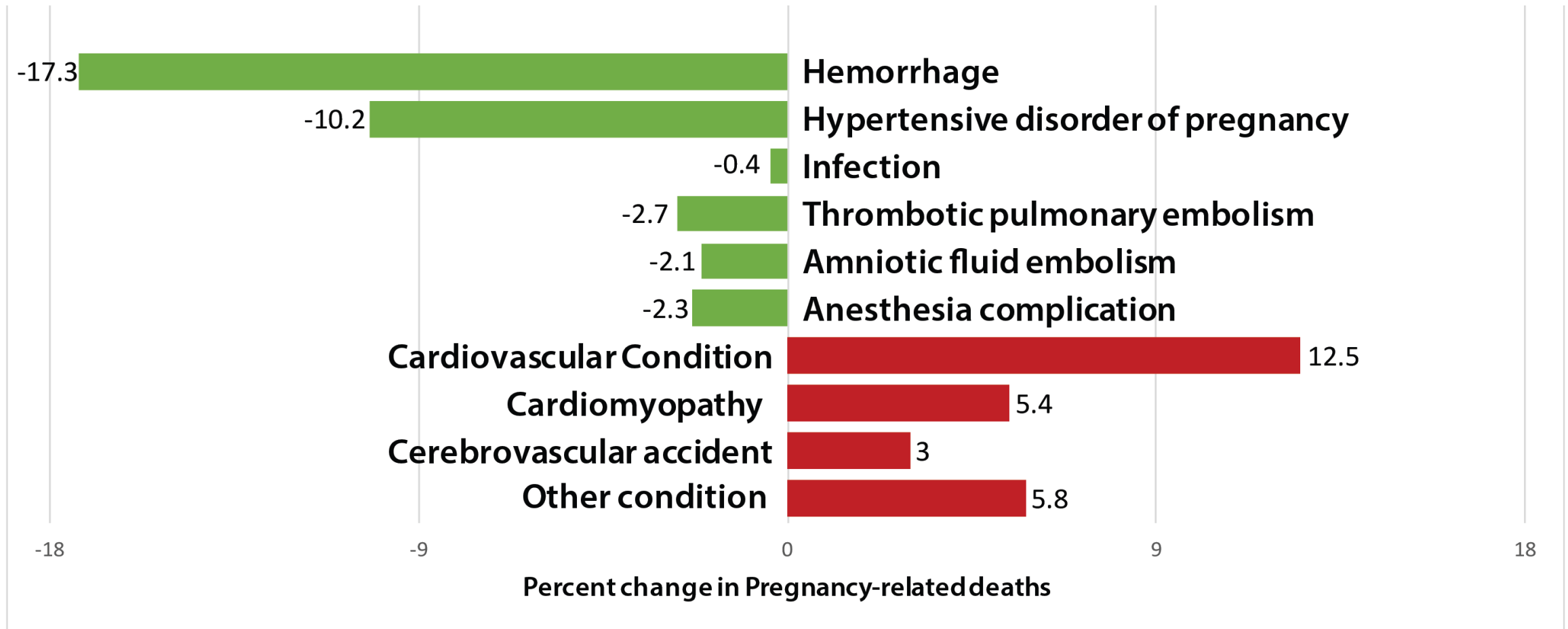
Source: National Vital Statistics System, NCHS

Pregnancy-related mortality, 1999-2017: not improving

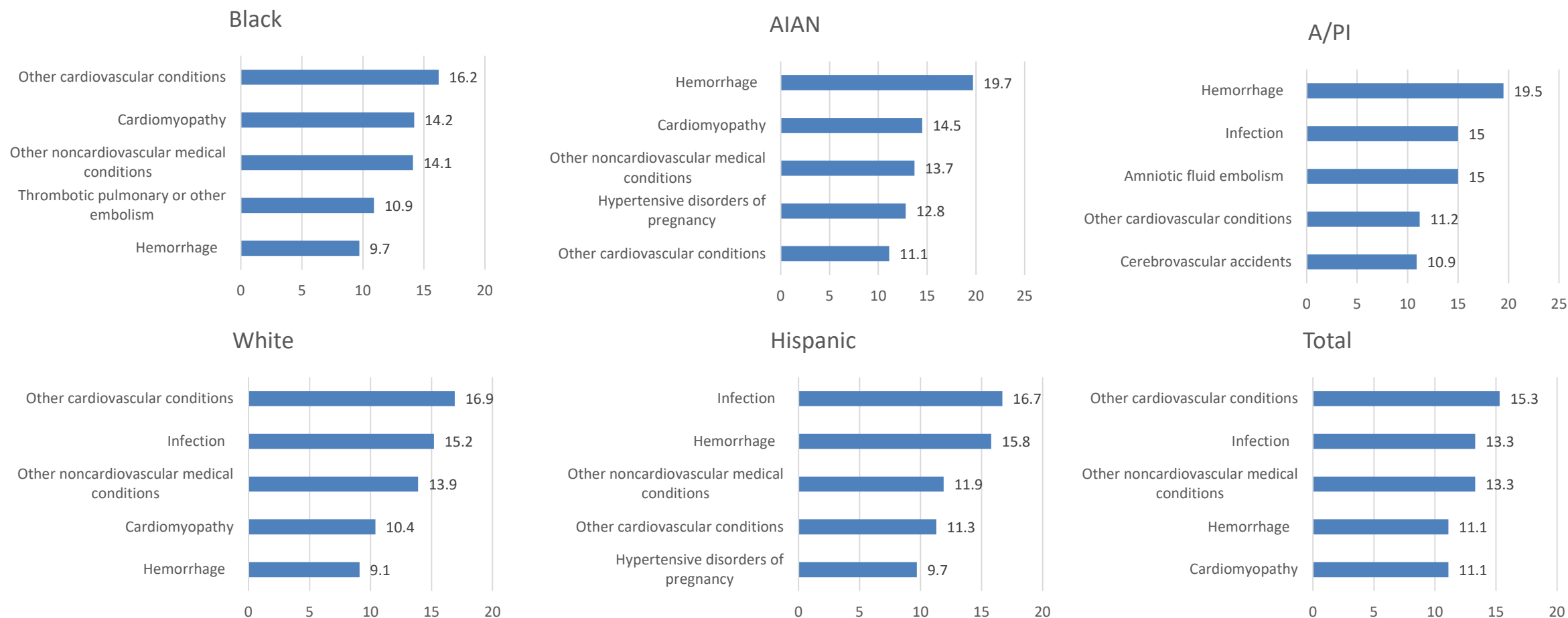


Source: CDC Pregnancy Mortality Surveillance System

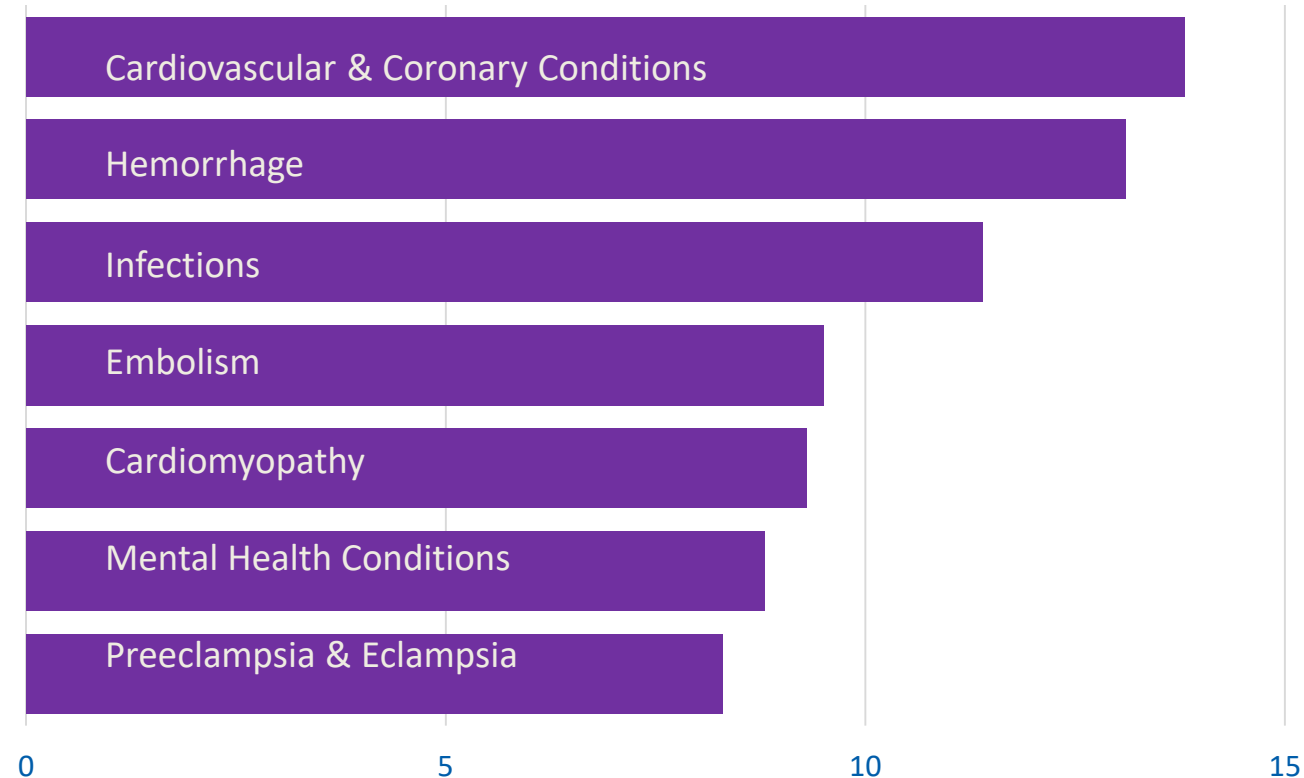
CAUSES OF PREGNANCY-RELATED DEATHS CHANGED BETWEEN 1987 AND 2013



CAUSE-SPECIFIC PREGNANCY-RELATED MORTALITY, BY RACE/ETHNICITY — 2007–2016



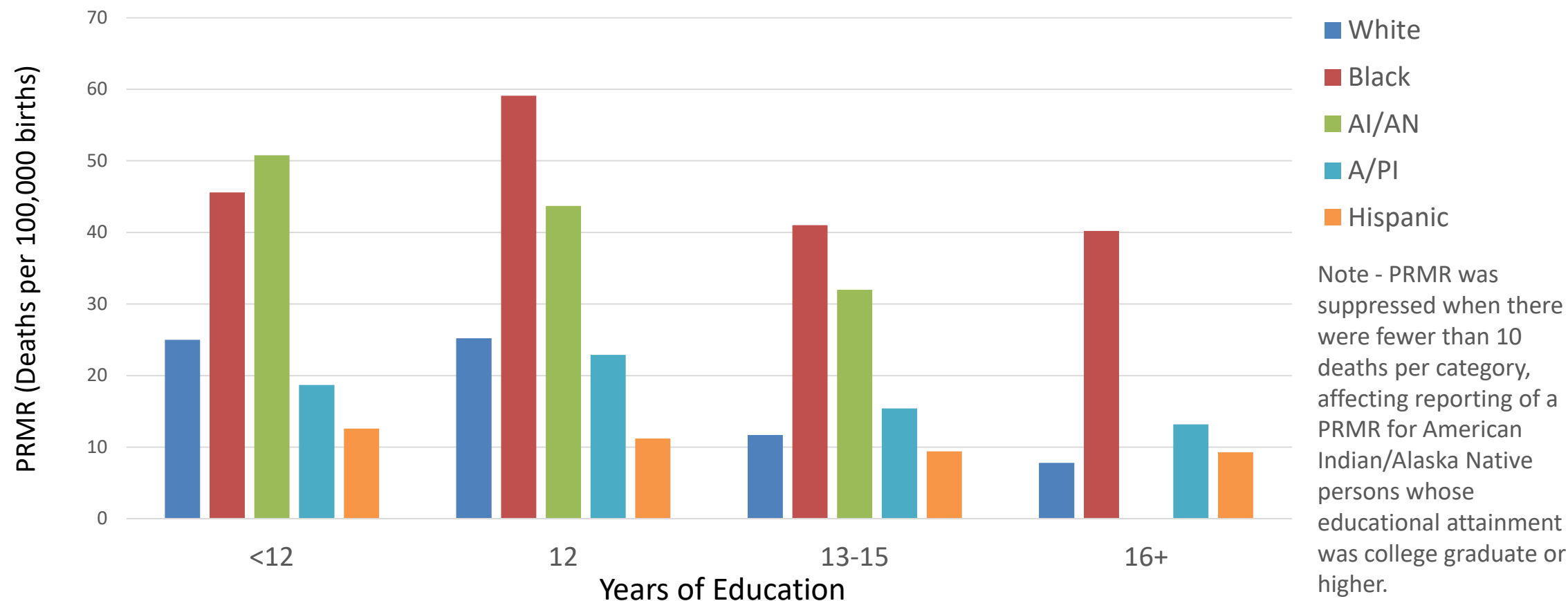
Leading causes of pregnancy-related death



Percent of pregnancy-related deaths

Source: Davis NL, Smoots AN, Goodman DA. Pregnancy-Related Deaths: Data from 14 U.S. Maternal Mortality Review Committees, 2008-2017. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2019

Pregnancy-related mortality ratios by Race/Ethnicity and Education, PMSS, 2011-2013



Timing of death in relation to pregnancy



31%

During pregnancy



36%

During delivery and
up to 1 week afterward



33%

1 week to
1 year after

COVID-19 & Pregnancy

- Pregnant women **ARE** at increased risk for severe illness from COVID-19
- Severe disease has been associated with other viral respiratory infections during pregnancy
- Pregnant women with COVID-19 might have an increased risk of adverse pregnancy outcomes, such as preterm birth
- Hispanic and non-Hispanic Black pregnant women appear to be disproportionately affected by COVID-19 infection during pregnancy.



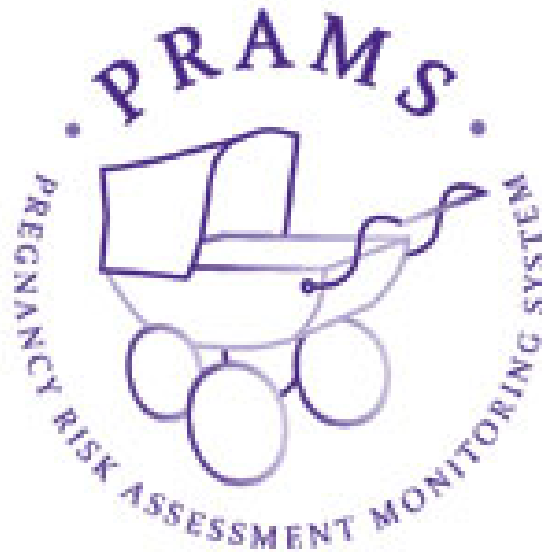
For more information, visit:
[If You Are Pregnant, Breastfeeding, or Caring for Young Children | COVID-19 | CDC](#)

¹Ramsey PS et al. Pneumonia in pregnancy. Obstet Gynecol Clin North Am 2001

²Galang RR et al. Severe coronavirus infections in pregnancy: A systematic review [online ahead of print, 2020 Jun 16]. Obstet Gynecol. 2020

³Mosby LG et al. 2009 pandemic influenza A (H1N1) in pregnancy: a systematic review of the literature. Am J Obstet Gynecol 2011

CDC's Initiatives to Improve Maternal and Infant Health



Thank you!

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