



Drivers of Maternal Mortality

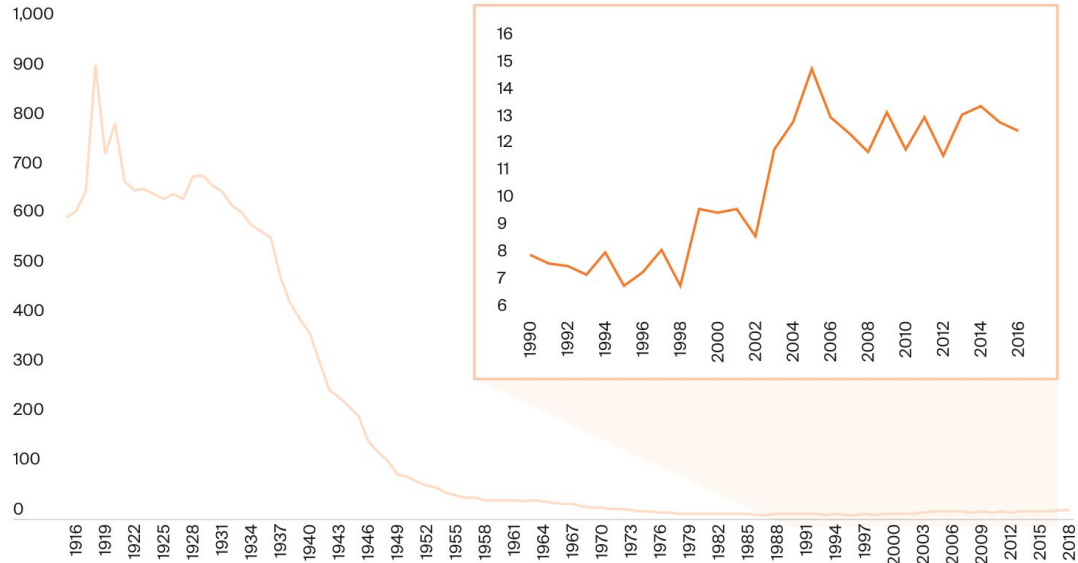
Rose L. Molina, MD, MPH

Department of Obstetrics and Gynecology
Beth Israel Deaconess Medical Center

Assistant Professor of Obstetrics, Gynecology & Reproductive Biology
Harvard Medical School

Maternal mortality had been gradually declining before recently rising.

Deaths per 100,000 births



[Download data](#)

Note: Shifts in measurement (e.g., not all states were part of registration system prior to 1933; infant race was based on race of the child until 1980 and on race of the mother post-1980) account for some of the variation over time. Years 2007–2016 based on two-year estimates of the pregnancy-related mortality rate: Emily E. Petersen et al., “Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016,” *Morbidity and Mortality Weekly Report* 68, no. 35 (Sept. 6, 2019): 762–65. Data for 2017 unavailable; data for 2018 based on official NVSS rate.

Data: NCHS, Maternal Mortality and Related Concepts, Vital & Health Statistics, Series 33, #3, & annual data reports. 1915–1960 data from NCHS, Vital Statistics Rates in the United States, 1940–1960.

Source: Eugene Declercq and Laurie Zephyrin, *Maternal Mortality in the United States: A Primer* (Commonwealth Fund, Dec. 2020). <https://doi.org/10.26099/ta1q-mw24>

Leading Causes of Pregnancy-Related Death

According to MMRC reviews in 36 states, 2017-2019

Mental health conditions	22.7%
Hemorrhage	13.7%
Cardiac and coronary conditions (heart conditions)	12.8%
Infection	9.2%
Embolism-thrombotic (blood clots)	8.7%
Cardiomyopathy (heart failure)	8.5%
Hypertensive disorders of pregnancy	6.5%
Amniotic fluid embolism	3.8%

Trost SL, Beauregard J, Njie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2022.

Timing of Pregnancy-Related Death

Among deaths for which timing in relation to pregnancy is known, approximately 22% of deaths occurred during pregnancy, 25% occurred on the day of delivery (within 24 hours of the end of pregnancy) or within a week after delivery, 23% occurred from 7 to 42 days postpartum, and 30% occurred in the late postpartum period (43–365 days postpartum, Table 3).

Table 3. Distribution of pregnancy-related deaths by timing of death in relation to pregnancy, data from Maternal Mortality Review Committees in 36 US states, 2017–2019*

	N	%
During pregnancy	216	21.6
Day of delivery	132	13.2
1–6 days postpartum	120	12.0
7–42 days postpartum	233	23.3
43–365 days postpartum	301	30.0

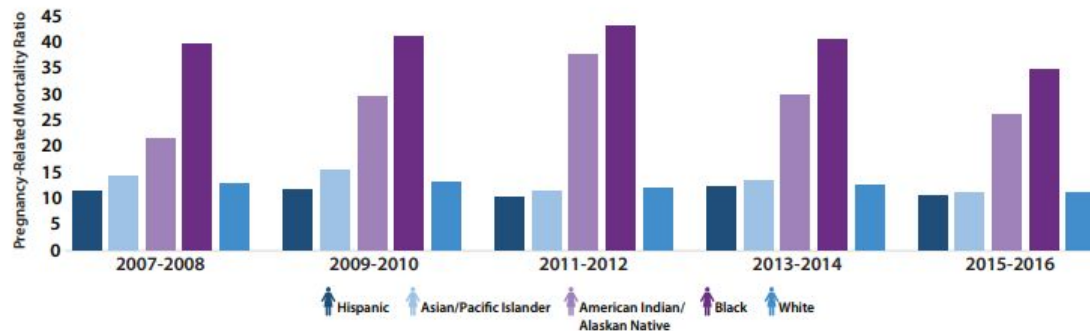
*Specific timing information is missing (n=2) or *unknown* (n=14) for 16 (1.6%) pregnancy-related deaths.

Among pregnancy-related deaths with information on timing,

**53% occurred
7–365 days
postpartum.**

Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016

Data confirms significantly higher pregnancy-related mortality ratios among Black and American Indian/Alaskan Native women. These gaps did not change over time.



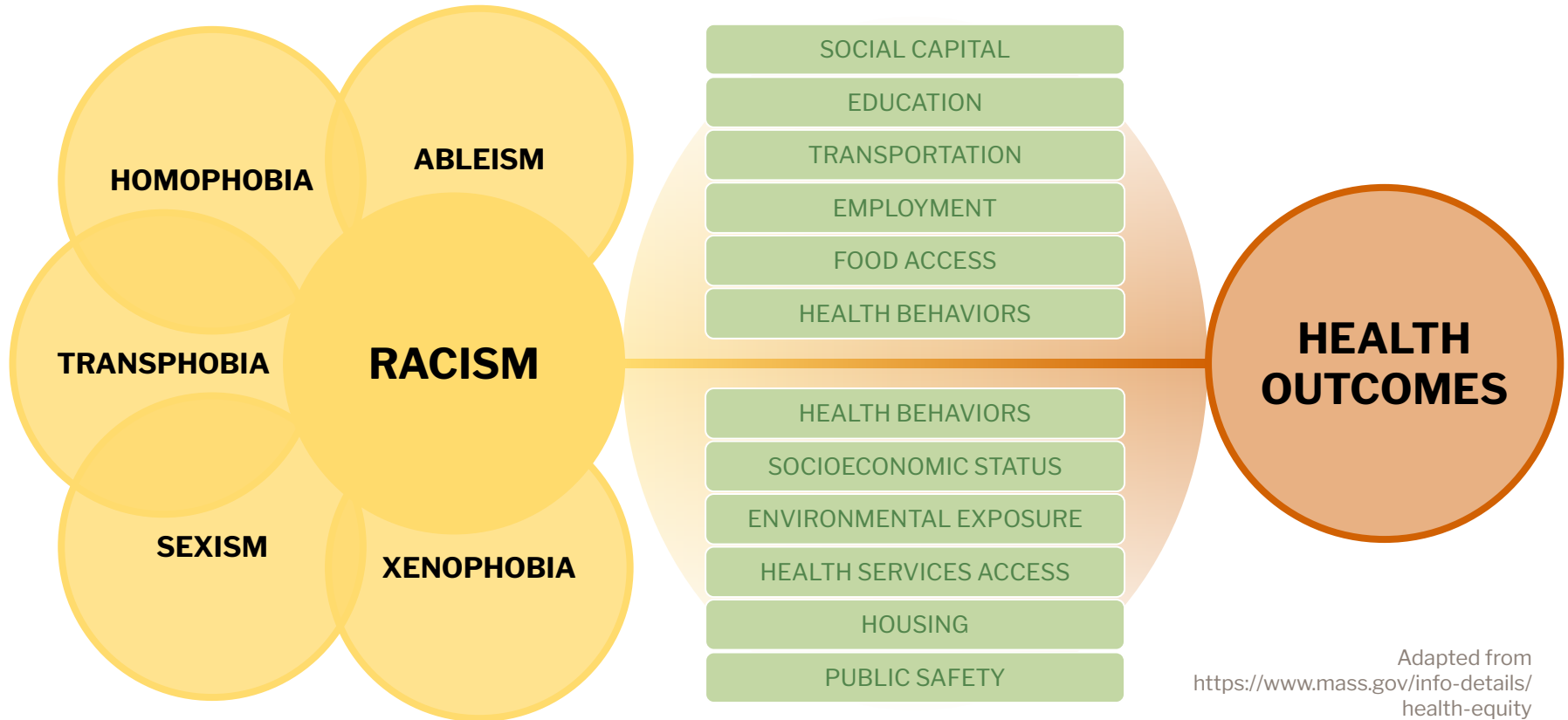
700

About 700 women die each year in the U.S. as a result of pregnancy or its complications.

2-3x

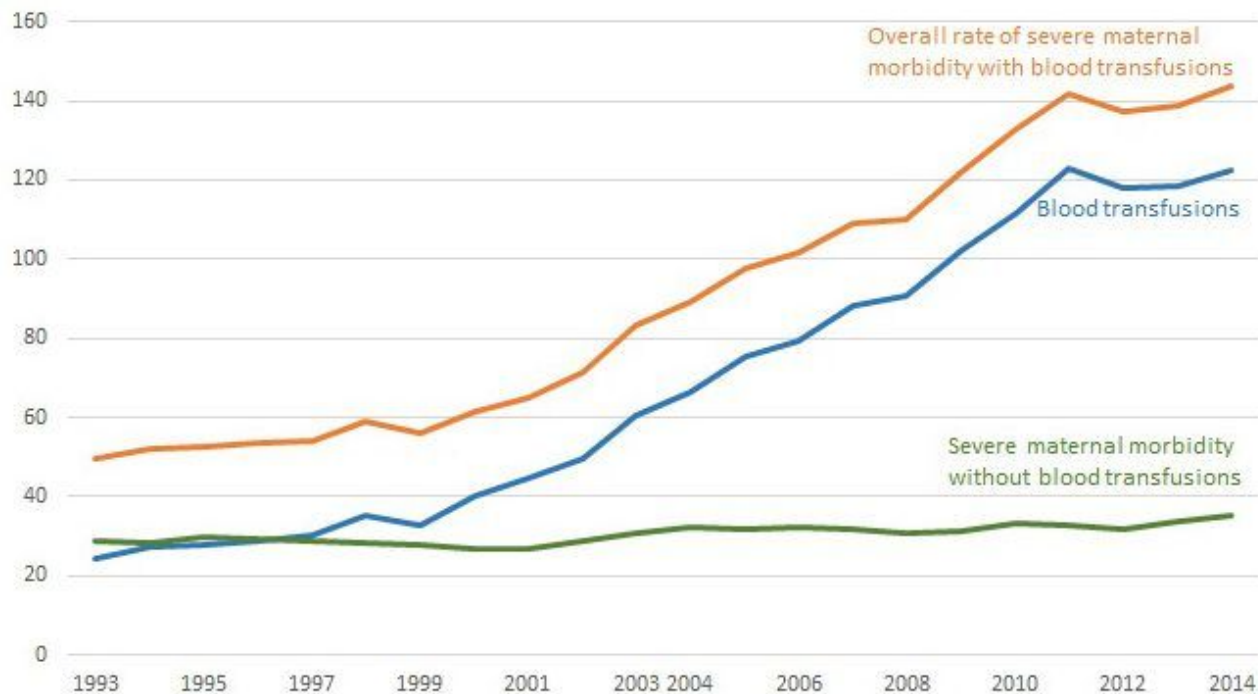
American Indian/Alaska Native and Black women are 2 to 3 times as likely to die from a pregnancy-related cause than white women.

Systems of Oppression Drive Health Inequities



Severe Maternal Morbidity

Rate of severe maternal morbidity per 10,000 delivery hospitalizations



Mistreatment of People of Color During Childbirth

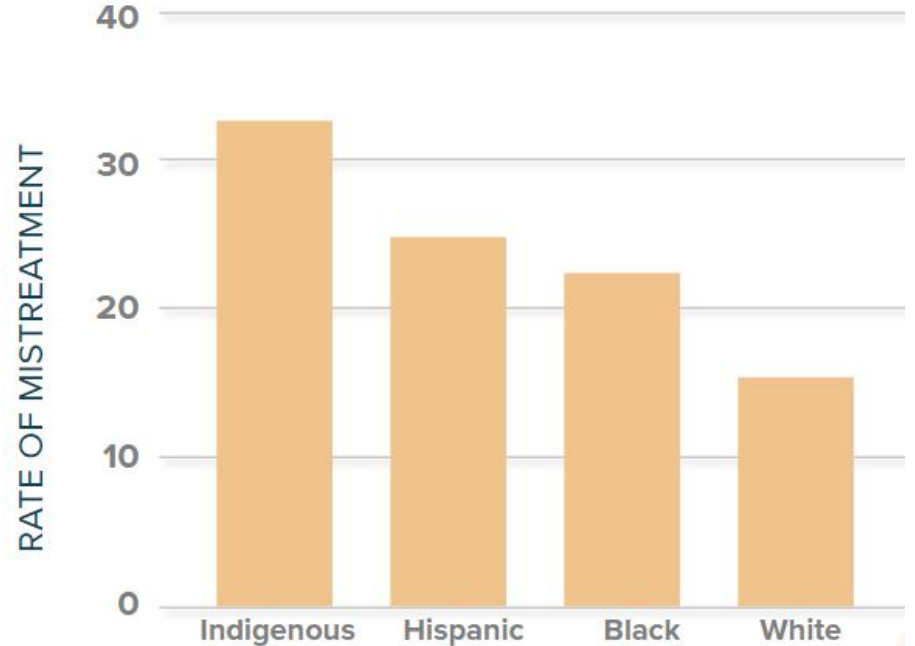
Being shouted at or scolded by a health care provider



Health care providers ignoring women, refusing their request for help, or failing to respond to requests in a reasonable amount of time

**1 in 6
WOMEN**

EXPERIENCE MISTREATMENT
DURING CHILDBIRTH





Thank You

Rose L. Molina, MD, MPH

Department of Obstetrics and Gynecology
Beth Israel Deaconess Medical Center

Assistant Professor of Obstetrics, Gynecology & Reproductive Biology
Harvard Medical School