**Medical News & Perspectives**

**Detailed Maternal Mortality Data Suggest More Than 4 in 5 Pregnancy-Related Deaths in US Are Preventable**

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As host of the Birthright Podcast, Kimberly Seals Allers is trying to change the narrative surrounding Black individuals’ maternal health.

“There has been an overly negative doom-and-gloom narrative,” Seals Allers, who describes herself as a maternal health strategist, said in an interview with *JAMA*. “What it has done to Black birthing people is stoke fear.”

Although Black people in the US have disproportionate maternal mortality rates, fear of this, Seals Allers says, can hinder what should otherwise be a joyful experience for the new parents and their families. Her podcast, which is funded by the California Health Care Foundation (CHCF) and the Commonwealth Fund, emphasizes joyful birth experiences and successful recovery after difficult birth experiences. She’s also creating vignettes about successful birth experiences as a teaching tool for clinicians.

Seals Allers is part of a growing chorus of advocates and clinicians who say that reducing and eliminating preventable maternal morbidity and mortality in the US will take a radically different, multipronged approach. They argue that listening to pregnant patients and parents, tackling racism in health care, and building new systems of care are essential.

“What we see over and over is a system that cannot be fixed with the current model of care,” Stacie Geller, PhD, professor and director of the Center for Research on Women and Gender at the University of Illinois in Chicago, said in an interview. “We need to turn the model of care upside down.”

Unreliable data have long obscured the true extent of US maternal mortality and its disproportionate effects on some groups, but the Centers for Disease Control and Prevention (CDC) says about 700 patients die each year as a result of pregnancy or its complications.

A new CDC report provides the most detailed picture to date. The data on 1018 pregnancy-related deaths in 36 states between 2017 and 2019 come from maternal mortality review committees, multidisciplinary groups convened at the state or local level to review all deaths during or within a year of pregnancy. They show that more than 4 in 5 US pregnancy-related deaths are preventable, an even larger proportion than the 2 in 3 previously reported by the CDC in 2019.

An underlying cause was known for 987 of the deaths. Almost 1 in 4 of these deaths were related to a mental health condition, including suicide or overdose linked to a substance use disorder. Hemorrhage accounted for about 14% of the deaths, cardiac and coronary conditions for 13%, infection for 9%, and blood clots and cardiomyopathy for 9% each. Hypertensive disorders of pregnancy made up about 7% of deaths. Other causes that accounted for at least 10 deaths included amniotic fluid embolism, injuries (mainly homicides), cerebrovascular accidents, cancer, metabolic and endocrine conditions, and pulmonary conditions. The data set included 82 suicides and 29 homicides.

More than half of the deaths in the study occurred after the first week through 1 year after delivery. David Goodman, PhD, lead of the Maternal Mortality Prevention Team in the CDC’s Division of Reproductive Health, noted in an interview that nearly all patients who give birth are out of the hospital and at home in their communities during this period. Goodman said he hopes the report raises clinician awareness about the risks that extend through a year after delivery.

“The risk continues, and there’s a potential need for attention and care beyond the delivery period and even the traditional 42-day [postpartum care] period,” he said.

**Race and Maternal Deaths**

The data also highlight persistent racial disparities. Almost half of maternal deaths were among White individuals. But 31% occurred among Black individuals, who represent only 14% of the US population.

Moreover, the leading causes of death varied by race and ethnicity. Cardiac and coronary conditions were the leading cause of death among Black people. Mental health conditions were the primary cause of death...
among Hispanic and White people. And hemorrhage contributed the largest proportion of deaths among Asian people.

“This points to implicit bias and racism, not race, as the causes of disparities in maternal care,” Amelia Cobb, MPH, the CHCF’s senior program officer of People-Centered Care and Learning Impact teams, said in an interview.

She noted that the high rate of cardiac deaths and deaths after the postpartum period are consistent with news reports about deaths or near misses among Black parents across the country who sought help for postpartum complications but had their concerns ignored or minimized. For example, a 2017 investigation by NPR and ProPublica that collected 200 Black women’s stories detailed symptoms of serious cardiovascular conditions during pregnancy or postpartum not being taken seriously or properly addressed.

In 2018, the CHCF’s Listening to Mothers in California report found that about 1 in 10 Black patients said they experienced mistreatment because of their race or ethnicity compared with about 1 in 100 White people. About 10% of Black patients reported rough handling and rude or threatening language, compared with about 8% of White patients. Those who spoke a language other than English also reported elevated rates of mistreatment compared with White patients. About 1 in 5 Black patients said they felt pressured to have a cesarean delivery, about twice the number of White patients who reported such pressure, and 42% of Black patients had the procedure compared with 29% of White patients.

In an email interview, Angela D. Aina, MPH, co-founding executive director of the Black Mamas Matter Alliance, a Black women-led national organization, said that the CDC’s latest data highlight the need to address the systematic failures in health care delivery that contribute to maternal health inequity. She said there is a need to acknowledge the deep-seated history of institutional racism and what she and others call obstetric violence against Black individuals. She also wants to see more accountability in the health care system and greater access to holistic care models with culturally congruent clinicians and caregivers.

“Black birthing people need access to providers who will trust and listen to them,” Aina said.

A separate report from the CDC and the National Indian Health Board (NIHB) analyzed 17 maternal deaths among American Indian and Alaska Native individuals represented in the maternal mortality review committees data. It found that almost all the deaths were preventable. Mental health conditions caused nearly one-third of the deaths, and hemorrhage caused nearly one-fifth.

“Understanding differences in the underlying causes of pregnancy-related death by race and ethnicity is important for identifying prevention opportunities to reduce inequities in maternal mortality,” the authors of the CDC report wrote. The NIHB is also working with tribes to assess the possibility of developing tribally led maternal mortality review committees. The goal: to improve counting and ensure that tribes have access to the data they need to enact preventive measures.

“Our mothers face some really unique and daunting obstacles when attempting to access basic maternity care,” said NIHB’s Chief Executive Officer Stacy Bohlen (Sault Ste. Marie Tribe of Chipewa Indians).

Historical trauma from US policies, including genocide, forced migration, cultural erasure, child removal, and forced sterilization profoundly impact Indigenous people’s health. Native Americans won the right to health care through treaties with the US government and the 1976 Indian Health Care Improvement Act, but many may still lack health care access or insurance. Tribal citizens of the 574 federally recognized tribes can visit Indian Health Service facilities or in some cases tribally offered facilities but may have to travel long distances to get there.

The NIHB has partnered with the CDC and conducted focus groups to develop culturally relevant and region-specific materials for their Hear Her Campaign, including 5 videos featuring Indigenous women’s birth testimonials due to be released later this fall. The effort is part of the CDC’s larger Hear Her Campaign to alert the public and clinicians to maternal health warning signs.

“The most important thing is to shift to holistic standards of care that address the unique needs of Indigenous mothers and communities,” Bohlen said. “The current hospital-centered maternal and fetal care model does not sufficiently meet the needs of women of color.”

New Models of Care

In May, the CDC published a report outlining how states can use maternal mortality review committee data to improve maternal outcomes. The report highlights successful state-level strategies and emphasizes the need to recruit and retain a diverse workforce, address discrimination and interpersonal racism in health care, and ensure respectful, high-quality care for all women. It highlights the importance of engaging with community partners and increasing access to health care by expanding Medicaid coverage during the postpartum period. It also advocates for more standardized care through safety bundles created by the American College of Obstetricians and Gynecologists (ACOG) Alliance for Innovation on Maternal Health (AIM), for example.

“We are trying so hard. We’re trying so many different ways, and we still haven’t gotten to that gold standard of a healthy mother, healthy baby,” ACOG President Iffath Abbasi Hoskins, MD, said in an interview. At the urging of ACOG and other organizations, the US enacted the Maternal Health Quality Improvement Act, which provides funding for AIM and antibias training, and extended Medicaid coverage for up to a year post partum through the American Rescue Plan Act. According to the US Department of Health and Human Services, 27 states and the District of Columbia had extended coverage or applied to do so by this July. ACOG has also backed the Black Maternal Health Momnibus, a package of bills to provide funding for improving Black individuals’ maternal health outcomes.

The CDC report also highlights the importance of culturally concordant community health care workers—including doulas and midwives—something many advocates strongly support. Cobb noted that having a midwife-attended birth is associated with improved experiences and better outcomes for Black, Indigenous, and Latina and patients. More than half of those in the Listening to California survey indicated they wanted or would consider using a doula or midwife. Some states, including Illinois, Minnesota, New Jersey, and Oregon, have expanded Medicaid coverage to include doulas, according to the CDC report.

“Midwives play a big role as part of the birthing person’s care team and make sure that the mother is heard and listened to during labor and delivery,” Cobb said.
Health institutions across the country are using training programs to mitigate clinician bias and racism. California has mandated that all clinicians who provide perinatal care receive evidence-based anti-bias training, and the CHCF has created a free continuing medical education program.

But Seals Allers said that training is not enough—hospitals must hold clinicians accountable and demonstrate that antibias training improves care. To increase transparency, she created the Yelp-like Irth app with funding from the CHCF and other foundations. She works as a grant-funded project manager for the app, which creates a platform for Black or Hispanic parents to report their experiences with maternal and pediatric care. She's now working with hospitals to improve care using data from reviews created by more than 10,000 respondents. She would also like to see a broader focus on collecting data on the whole spectrum of birth experiences, including disrespect, trauma, and maternal morbidity. Severe maternal morbidity affects 50,000 to 60,000 US patients each year.

Greater attention is also needed to maternal mental health. To that end, Hoskins is focusing her presidential tenure this year on ACOG’s Minding Mental Health Initiative to promote awareness of and better screening and treatment for mental health conditions during and after pregnancy. “The goal is to destigmatize and normalize mental health and make it a priority,” Hoskins said.

Geller and her colleagues on Illinois’ maternal mortality review committees recommend policy changes for substance use treatment among peripartum patients. She explained that people often stop or decrease drug use during pregnancy but are at high risk of overdose if they experience a postpartum relapse. They may also be afraid to seek treatment for fear of losing their children. “We’re trying to reframe the conversation around substance use disorder, so it becomes decriminalized,” Geller said. She and her colleagues on the committee are also working to increase treatment access.

Several multipronged approaches are also being tested or implemented across the country. The Johns Hopkins Center for Indigenous Health has created and deployed the Family Spirit program in collaboration with more than 100 tribal communities in 16 states. Evidence shows that the program improves parenting practices, reduces drug use and depression among patients after delivery, and improves children’s emotional and behavioral development during their first 3 years. The Maternal Health Multilevel Intervention for Racial Equity, or Maternal Health MIRACLE, study tests whether a 3-pronged intervention can lower maternal morbidity in Michigan’s Genesee and Kent counties. The intervention includes a telehealth option for Medicaid-eligible mothers who opted not to engage in prenatal and postnatal home visit programs, antibias training for clinicians created and deployed by community leaders, and quality improvement bundles for community care health professionals. The first quality bundle establishes a checklist for clinicians caring for patients who are transitioning into postnatal care, according to Peggy Vander Meulen, MSN, RN, program director of Strong Beginnings, a Grand Rapids–based community organization that works to improve health equity.

Geller and her colleagues have a study underway comparing usual care with a model that matches Black patients with racially concordant midwives, nurse navigators, and doulas who provide care during and up to a year after pregnancy. Midwives meet regularly with the pregnant patients. Nurse navigators schedule care and help with other obstacles like housing or transportation challenges. And doulas visit patients during and after pregnancy for up to a year.

“It’s a whole different model of care that wraps around the woman and helps care for her during pregnancy and in the postpartum period,” Geller said. “Until we have a health care system that recognizes the importance of that, our preventable maternal mortality rate is not going to change dramatically.”

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Conflict of Interest Disclosures: Dr Hoskins reported that she is president of the Board of Directors at ACOG; a member of the Board of Directors at St. John’s Hospital in Queens, New York; and a member of the Office of Professional Medical Conduct and the Governor’s Maternal Mortality Review Board, both in New York. Seals Allers reported that she is a grant-funded project director for the Irth app. No other disclosures were reported.

Note: Source references are available through embedded hyperlinks in the article text online.