Tip Sheet: Maternal Mortality in the U.S.

What Is the Overall Problem?
Maternal death is the pregnancy-related mortality of a mother during or after pregnancy—for up to a year postpartum (after birth), according to the Centers for Disease Control and Prevention (CDC). This can include conditions related to the pregnancy, such as hemorrhaging, hypertension, heart disease, and mental health issues such as suicide. While maternal mortality rates around the world decreased by more than one-third from 2000 to 2015, the rate of maternal deaths in the U.S. increased 100% since 1987.¹

Despite improvements in medical technology and treatment, recent findings report that the U.S. has the worst rate of maternal mortality compared to any country in the developed world. Women in the U.S. are twice as likely to die from pregnancy-related complications than women in Saudi Arabia and three times as likely to die than women in the UK. Particularly concerning, Black mothers in the U.S. are 3 to 4 times as likely to die from issues related to childbirth as white women.

In addition, thousands of women in the U.S. suffer major complications during pregnancy and childbirth, known as “severe maternal morbidity,” that are near-fatal (i.e.: heart attack, hysterectomy, transfusions, seizures, sepsis, eclampsia—typically leading to ICU admissions). The severe maternal morbidity rate has increased 100% over the last 12 years in the U.S., reports the
CDC, and is 100 times higher (1.5 to 2 per 100 births) than the death rate. It estimates 50,000 mothers each year experience dangerous or life-threatening complications in childbirth.

**What Are the Causes of Maternal Deaths in the U.S.?**

Historically the most common causes of maternal deaths were hemorrhaging in childbirth and hypertensive disorders like preeclampsia and infection. However, recently an upsurge in deaths have resulted from cardiovascular disease and other underlying medical conditions. Rates for the leading causes of maternal death (cardiovascular disease and preeclampsia) increased 72% over the last two decades (1993-2014). These complications are 80-90% preventable, yet they account for over 80% of cases of severe maternal morbidity in the US and 20-30% of maternal deaths.

![Causes of pregnancy-related death in the United States: 2011-2013](chart)

**Who’s Most at Risk?**

Black women and women in rural areas have the highest risk for maternal mortality and maternal morbidity. The risk for maternal mortality for Black women is at a rate 3 to 4 times higher than women of other race/ethnicities. For instance, preeclampsia and eclampsia seizures are 60% more common for Black women. Black women comprise only 11% of U.S. births, but account for more than one quarter (28%) of maternal deaths.

It is important to note that besides maternity care, health disparities for Black women are also found in treatment for cardiovascular disease, diabetes, cancer and pain management. The reasons for such disparities are complex and include but are not limited to: lack of access to health care, lower quality care, poverty and racial bias attributed to provider communication and behavior, which contributes to lower quality care that can affect health outcomes. Immigrant women who do not speak English may also avoid pre-natal care due to discrimination by providers and a fear of disclosure of undocumented status.
MATERNAL MORTALITY RATES (per 100,000 births) in 2018

Additionally, the rate of maternal mortality in rural areas is significantly higher than in large cities, due to “maternity deserts” related to rural hospital closures in some states. For example, there were 45 hospitals in Alabama’s rural counties providing obstetrical services in 1980. Today only 16 remain. Prenatal care, childbirth and postpartum care now requires a 45-minute or hour-long drive for more than half of women in rural Alabama. This appears to be particularly acute in states that did not expand Medicaid under the Affordable Care Act (ACA).

In 2014, 54% of women in U.S. rural counties lacked hospital obstetric services. Only 6% of OB/GYNs work in rural areas, though 15% of the population live in rural America, per the American Congress of Obstetricians and Gynecologists. A key driver is lack of care for medical problems like hypertension and diabetes before and between pregnancies. Stress connected to poverty is a significant factor contributing to the disparities in maternal mortality.

Can Maternal Deaths Be Prevented?
According to the CDC, 60% of all maternal deaths are preventable. Solutions require health providers, policy-makers and communities to make maternal health a priority, to analyze problems in specific communities, and to address deficiencies. Increased prenatal care and supportive caregivers, such as midwives and doulas, help improve women’s health outcomes.

California is the only state in the U.S. where maternal mortality has decreased in recent years. California’s rate is now one-third of the national rate, making it on par with Western Europe. Success in this state at addressing this problem has been widely attributed to quality measurement and improvement programs developed by the California Maternal Quality Care Collaborative (CMQCC) and to the statewide partners that have focused together on this issue. For example, in collaboration with California’s Department of Public Health, CMQCC conducted a review of maternal
mortality cases and pinpointed the key drivers of death which include hemorrhage, preeclampsia, cardiovascular disease and the rising rates of C-sections. CMQCC then developed “how to” toolkits for providers to address each of these key drivers and deployed them throughout the state via quality improvement collaboratives.

**The Bottom Line**
The U.S. has an unacceptably high rate of maternal mortality and especially egregious disparities for Black mothers. These facts are especially disturbing considering that the U.S. spends more on health care than any other country. As one of the wealthiest nations, we have the resources and ability to decrease rates. We need to prioritize women’s health and implement effective policies to address these deficiencies, especially for Black mothers.

**Case Study**
**Amanda,** a 32-year-old Black woman, grew up in Texas and stayed in her small town. An energetic and lively mom, she held a full-time job to help support her family, working an early shift so she had time to get her 8-year-old son to Little League practice and help her 6-year-old daughter with homework after school. When she learned she was pregnant again with her third child, she was a little surprised but happy. Her entry-level job didn’t offer health insurance but fortunately, her husband’s company’s plan covered maternity care, though the medical clinic was not nearby and they shared one car. The stresses of juggling her work schedule, home life and doctor’s appointments took its toll on her pregnancy. She developed headaches, leg swelling, fatigue and back pain but complaints about her symptoms were dismissed as “normal and typical” for pregnancy by her healthcare providers.

A couple of days after delivering her baby and coming home, the nausea Amanda had experienced in the hospital felt worse. She called the doctor’s nurse, who shrugged it off as indigestion. After nibbling on dinner, she felt weak and lay down in bed with the baby. Her stomachache wouldn’t quit. She started sweating profusely and became short of breath. Her husband called an EMS unit which arrived 30 minutes later and did tests. They concluded she must just have a bad case of gas, and only suggested she take an anti-acid tablet and rest. She felt frustrated. They seemed to brush aside her description of severe pain.

Amanda tried to relax but her breathing grew more labored. The pain intensified. Their hungry baby cried but Amanda couldn’t feed her. Juan worried about his wife’s condition and thought something was seriously wrong. A half-hour after the paramedics left, he gathered up the kids and their new baby, rushing to take the 45-minute drive to the hospital. In the ER, after examining her and running blood tests and an echocardiogram, the doctor determined she was experiencing heart failure resulting in a heart attack and rushed her to the intensive care unit, where she died of cardiac arrest.

Her diagnosis was postpartum cardiomyopathy (PPCM), which is now one of the leading causes of maternal mortality, accounting for about 11% of deaths. Amanda’s heart enlarged and became unable to pump sufficient blood to support her body. The symptoms (fatigue, swelling, shortness of breath) are typical in pregnancy, so PPCM went unnoticed. When caught early, many women survive and recover full heart function. Delays in treatment can lead to disability and death. Amanda lost precious time with the EMS visit, providers ignoring her symptoms, hoping the pain would subside and the long drive to the hospital.
The case especially illustrates a common issue of minimizing the complaints of pregnant women largely because they are young and appear otherwise healthy. Not listening to women’s complaints is particularly a problem for Black women as the recent Serena Williams’ story about complications during pregnancy with a pulmonary embolism shows.

Resources:

Lost Mothers: Maternal Care and Preventable Deaths
https://www.propublica.org/series/lost-mothers

Why America’s Black Mothers and Babies Are in a Life or Death Crisis

Pregnancy Related Deaths:
https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-relatedmortality.htm

Why is U.S. Maternal Mortality Rising?
https://jamanetwork.com/journals/jama/fullarticle/2645089

Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care

Maternal Mortality and Morbidity in the United States
http://www.who.int/bulletin/volumes/93/3/14-148627/en/


Maternal Health Care is disappearing from rural America

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i The WHO (World Health Organization) defines maternal mortality as a pregnancy-related death during pregnancy or within 42 days postpartum.

ii Preeclampsia is a complication during pregnancy marked by the sudden onset of high blood pressure in women who previously have not experienced high blood pressure. Other characteristics include excess levels of protein in urine and swelling in the feet, legs, and hands. Beginning after 20 weeks of pregnancy, if undetected or untreated, preeclampsia can lead to a dangerous condition for the woman and baby and requires immediate delivery of the baby.