

# Addressing Opportunities to Improve Maternal safety during childbirth



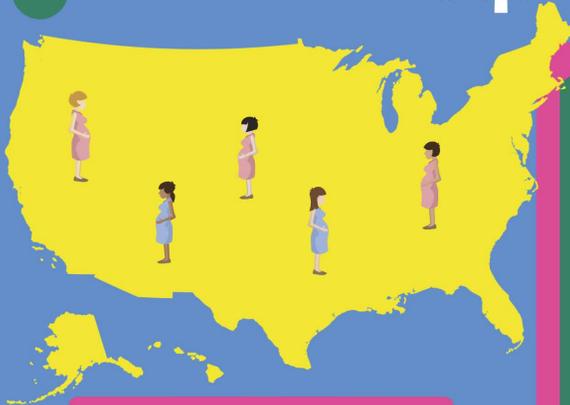
According to the World Health Organization, globally more than half a million women die each year during pregnancy, childbirth, or during the postpartum period

99% of women in developing countries

The leading cause of maternal mortality is hemorrhage, severe blood loss usually occurring immediately after delivery.



## Disparities in U.S. Maternal healthcare suggest racial inequities



Despite the United States spending the most money on continued advancements in health care, it has higher maternal mortality rates than many other developed country.

- Black, American Indian, and Alaska Native women are two to three times more likely to die from pregnancy-related causes than white women.
- The mortality rate is high for non-white women despite socio-economic status and education.
- During the pandemic in 2020 and 2021, Black women had the highest maternal mortality rates across all racial and ethnic groups.
- The mortality rate for college-educated Black women is 5.2 times higher than the rate for college-educated White women and 1.6 times higher when compared to White women with less than a high school diploma.



# Exploring Inequities in Maternal care



## Implicit or Explicit Biases from Healthcare Providers

Delays in diagnosis may reflect healthcare providers not believing the physiologic significance of abnormal findings or facing hierarchical barriers to requesting a further medical evaluation.



## Socioeconomic status

Healthcare inequalities lead to decreased quality of life in addition to shorter lifespans.



## Lack of Insurance coverage



## Underfunded public transportation in urban areas to medical facilities



## Long distance to medical care

Rural communities with large populations of multiple racial and ethnic groups had roughly a two times higher probability of needing to travel more than thirty miles to receive medical care. Black and American Indian/Alaska Native populations traveled the furthest.



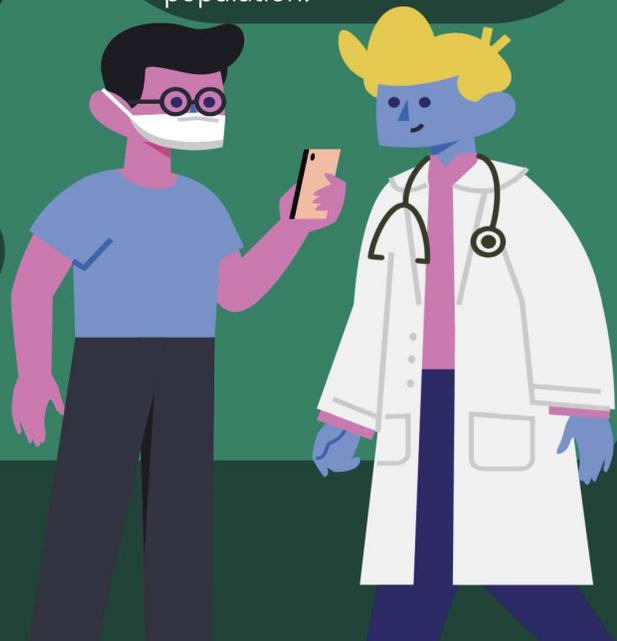
## Prior chronic medical conditions

Minority ethnic groups experience increased pregnancy-related deaths, infant mortality, prevalence and severity of chronic conditions, and mental health risks when compared to white population.



## Lack of Food security

Minority ethnic groups are less likely to have access to food and manage dietary restrictions to manage health conditions.



# Identifying Early warning signs of Maternal postpartum hemorrhage

Postpartum bleeding is unpredictable and delays in recognition contribute to a majority of deaths

## The Maternal Crisis Early Warning Criteria



Maternal confusion, agitation, or unresponsiveness; diagnosis of preeclampsia reporting a headache or shortness of breath



Systolic BP (mm Hg) <90 or >160  
Diastolic BP (mm Hg) <100



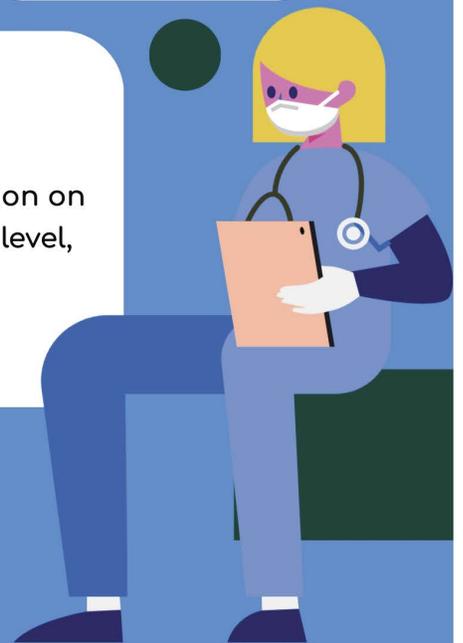
Heart rate (beats per min) < 50 or >120



Respiratory rate (breaths per min) <10 or >30



Oxygen saturation on room air, at sea level, % <95





### Did you know?

According to the National Human Genome Institute, all human beings are 99.9 percent identical in their genetic makeup.

## Talk with your friends, family, and neighbors and help debunk the myth that race is biological

Get involved by donating blood at your local blood donor facility and helping raise awareness for the need for lifesaving blood donations

Encourage routine health screenings for all ages

## References

Do you know what you can do to improve outcomes?. Minnesota Perinatal Quality Collaborative. (n.d.). [https://minnesotaperinatal.org/improve-bipoc-maternal-health-outcomes/?gclid=Cj0KCQjwtaMIbD3ARIsAARoaEzNRbvTZpCMuw1P9agwkiRX5ik\\_ZpncF77jVXWavMk4PxNdZX0PV08aAkLDEALw\\_wcB](https://minnesotaperinatal.org/improve-bipoc-maternal-health-outcomes/?gclid=Cj0KCQjwtaMIbD3ARIsAARoaEzNRbvTZpCMuw1P9agwkiRX5ik_ZpncF77jVXWavMk4PxNdZX0PV08aAkLDEALw_wcB)

Genetics vs. genomics fact sheet. Genome.gov. (n.d.). <https://www.genome.gov/about-genomics/fact-sheets/Genetics-vs-Genomics#:~:text=All%20human%20beings%20are%2099.9,about%20the%20causes%20of%20diseases.>

Latoya Hill, S. Artiaga. (2023, June 15). Racial disparities in maternal and infant health: Current status and efforts to address them. KFF. <https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-in-maternal-and-infant-health-current-status-and-efforts-to-address-them/>

Luke Horvath, Research Economist. (2022, March 8). Luke Horvath. RTI. [https://healthcare.rti.org/insights/health-equity-racism-and-proximity-to-hospitals?gclid=Cj0KCQjwtaMIbD3ARIsAARoaEy434UpR4e56ZlWKBTxJdAvM5t-8FNZfR5zK00s7hAvFjmg6-28SBAAv0-EALw\\_wcB](https://healthcare.rti.org/insights/health-equity-racism-and-proximity-to-hospitals?gclid=Cj0KCQjwtaMIbD3ARIsAARoaEy434UpR4e56ZlWKBTxJdAvM5t-8FNZfR5zK00s7hAvFjmg6-28SBAAv0-EALw_wcB)

Mhyre, J. M., D'Oria, R., Hameed, A. B., Lappen, J. R., Holley, S. L., Hunter, S. K., ... & D'Alton, M. E. (2014). The maternal early warning criteria: a proposal from the national partnership for maternal safety. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 43(6), 771-779.

Paxton, A., & Wardlaw, T. (2011). Are we making progress in maternal mortality? *New England Journal of Medicine*, 364(21), 1990–1993. <https://doi.org/10.1056/nejmp1012860>

World Health Organization. (2008). Universal access to safe blood transfusion (No. WHO/EHT/08.03). World Health Organization.