

Snapshot of Health Disparities in Michigan: Focus on Infant Mortality

Racial disparities affect how Michigan babies thrive. Disparities exist in infant mortality and its leading causes, including low birth weight, prematurity and sleep-related deaths.^{1,2}

If all races and ethnicities had experienced **similar** infant mortality rates in 2017, there would have been:

- **206** Black
 - **21** Hispanic
 - **6** American Indian
- fewer infant deaths.**

Out of every 1,000 babies born in Michigan:

5 White babies die before their first birthday.

8 Hispanic babies die before their first birthday.

14 American Indian babies die before their first birthday.

14 Black babies die before their first birthday.

Disparity Rates:



Hispanics infants die at nearly **twice** the rate of Whites.



American Indian infants die at nearly **three** times the rate of Whites.



Black infants die at nearly **three** times the rate of Whites.

Disparities in infant mortality in Michigan continue to persist and must be addressed to improve overall infant mortality rate.

The Lifecourse Perspective

Research has shown that a woman's exposure to various risk and protective factors influence her reproductive potential and the health of her children.³

For more information on social determinants that affect maternal outcomes, please see the Michigan Health Equity Status Report at: https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2985_78954---,00.html

Data source: Michigan resident infant mortality and live birth file, 2015-2017, Division for Vital Records and Health Statistics. Literature Source: 1. Infant safe sleep in Michigan: A comprehensive look at sleep-related death. Available from:

https://www.michigan.gov/documents/mdhhs/Safe_Sleep_Report_Final_1_12_2018_611613_7.pdf. 2. March of dimes, Racial and ethnic disparities in birth outcomes. Available from: https://www.marchofdimes.org/March-of-Dimes-Racial-and-Ethnic-Disparities_feb-27-2015.pdf

3. Lu MC and Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. Maternal and Child Health Journal 2003; 7(1): 13-30.

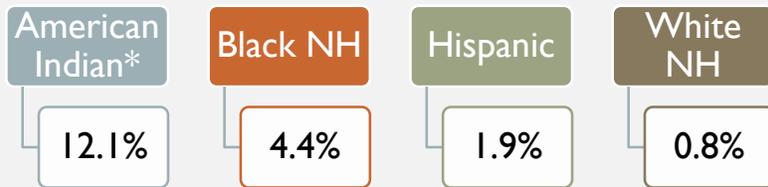
Psychosocial Determinants of Health

Psychosocial determinants of health are human interactions that can cause stress or other biological responses. Psychosocial determinants of health, along with socioeconomic and environmental determinants, differentially affect Michigan mothers. Reductions in racism, stress during pregnancy and feeling unsafe in one's neighborhood may lead to more infants living to see their first birthday.

Racism:

Studies have found a mother's self-reported experience of racism to be associated with very low birth weight and preterm infants.¹

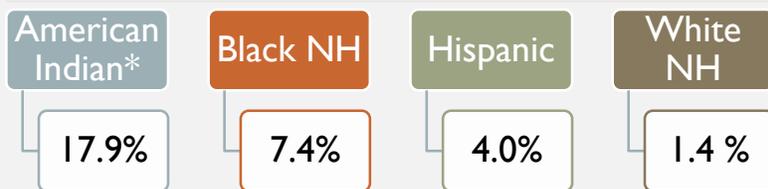
Experienced physical symptoms based on race



Physical symptoms include headache, upset stomach or pounding heart. Emotional symptoms include feeling angry, sad, or frustrated. Women reported symptoms occurring within 12 months prior to the baby's birth.

❖ American Indian mothers were **20 times** more likely to experience physical symptoms and **over 12 times** more likely to experience emotional symptoms based on race as compared to White, non-Hispanic (NH).*

Experienced emotional symptoms based on race



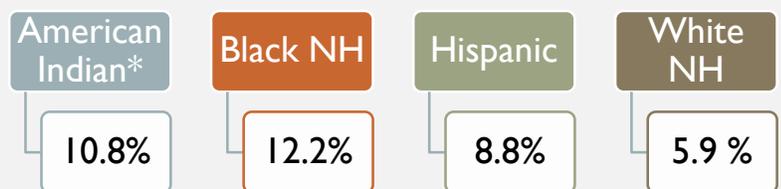
Stress:

Stress during pregnancy and throughout a mother's life has been associated with poor pregnancy and birth outcomes, including: preterm labor and delivery, low birth weight, and gestational diabetes.²

Percentage of moms experiencing six or more life stressors in year before delivery.

❖ NH Black moms reported feeling six or more life stressors at **2 times** the rate of NH White mothers.

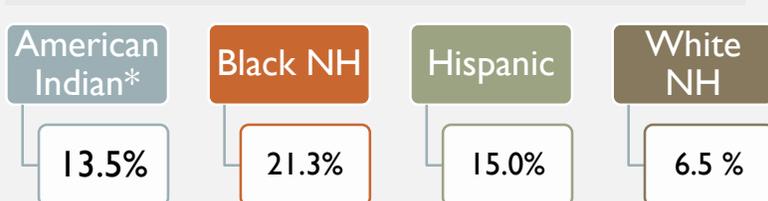
Life stressors in 12 months before delivery



Neighborhood Safety:

Feeling unsafe in one's neighborhood can be associated with maternal stress. Research has shown perceived neighborhood quality to be associated with adverse infant outcomes.³

Felt unsafe in neighborhood



Percentage of moms feeling always, often, or sometimes unsafe in neighborhood.

❖ NH Black mothers felt unsafe in their neighborhood at over **3 times** the rate of NH White mothers.

*American Indian data based on 2012-2013 American Indian PRAMS survey, rate ratio comparisons are to 2012-2013 Michigan PRAMS (data not shown).

Data Source: Michigan Pregnancy Risk Assessment Survey, 2012-2015. **Literature Sources:** 1. Patcher LM and Garcia Coll C. Racism and child health: a review of the literature and future directions. *Journal of Developmental and Behavioral Pediatrics* 2009; 30(3): 255-263. 2. Cardwell MS. Stress: pregnancy considerations. *Obstetrical and Gynecological Survey* 2013; 68(2): 119-129. 3. Bhatia et al. Association of mother's perception of neighborhood quality and maternal resilience with risk of preterm birth. *International Journal of Environmental Research and Public Health* 2015; 12(8) 9427-9443