hpio health policy institute of ohio

Health **Policy** Fact Sheet

Racial and geographic disparities in maternal morbidity and mortality

Overview

Every expecting Ohioan deserves the opportunity for a healthy pregnancy and a safe delivery. Stark differences in maternal health outcomes signal that not everyone has what they need to live a healthy life before, during and after pregnancy. Two of those outcomes — maternal morbidity and mortality — show clear disparities by race and geography in Ohio.

With collaboration from both public and private partners, it is possible to reduce severe maternal morbidity and mortality and improve health outcomes for Ohioans. Policymakers and other stakeholders can implement evidence-based strategies to ensure that parents and babies in Ohio are healthy and thriving.

3 key takeaways for policymakers

1. **Access to high-quality prenatal care** is essential for healthy pregnancies and births.
2. **Long-term, toxic stress** can create health problems that impact pregnancy.
3. **Strategies exist** to decrease disparities in maternal morbidity and mortality, and improve outcomes.

See page 4 for action steps and resources.

What are the drivers of maternal morbidity and mortality?

Access to high-quality prenatal care is essential for healthy pregnancies and births.

Receiving early and regular care throughout pregnancy is important, especially for the screening and management of health conditions that can increase the risk of maternal morbidity and mortality, including gestational diabetes and cardiovascular conditions.[1] Black women and women living in urban and rural areas experience a variety of barriers to prenatal care, including:

- **Transportation access.** Disinvestment from transportation has caused public transit to run slower or less frequently.[2] For example, public transit in urban areas can involve multiple transfers, resulting in a two-hour bus ride to travel what would have taken 20 minutes by car.[3] Still, parents in urban and rural areas often use personal vehicles as their main mode of transportation. In 2019, however, 22% of Black women lived in households without a vehicle, compared to 10% of all Ohio women.[4]
- **Provider shortages.** Hospital and obstetric unit closures and workforce shortages create barriers for Ohioans, particularly those in rural areas, to access prenatal care.[5] Over half of women living in rural areas need to travel 30 miles or more to receive services because of provider shortages near their homes.[6]
- **Implicit bias.** Racially-driven implicit bias in healthcare settings can result in the health concerns, complaints and questions of patients of color being taken less seriously by clinicians[7], resulting in lower-quality care, such as the misdiagnosis of conditions and diseases in patients of color, ultimately leading to disparities in health outcomes.[8]

What are maternal morbidity and mortality?

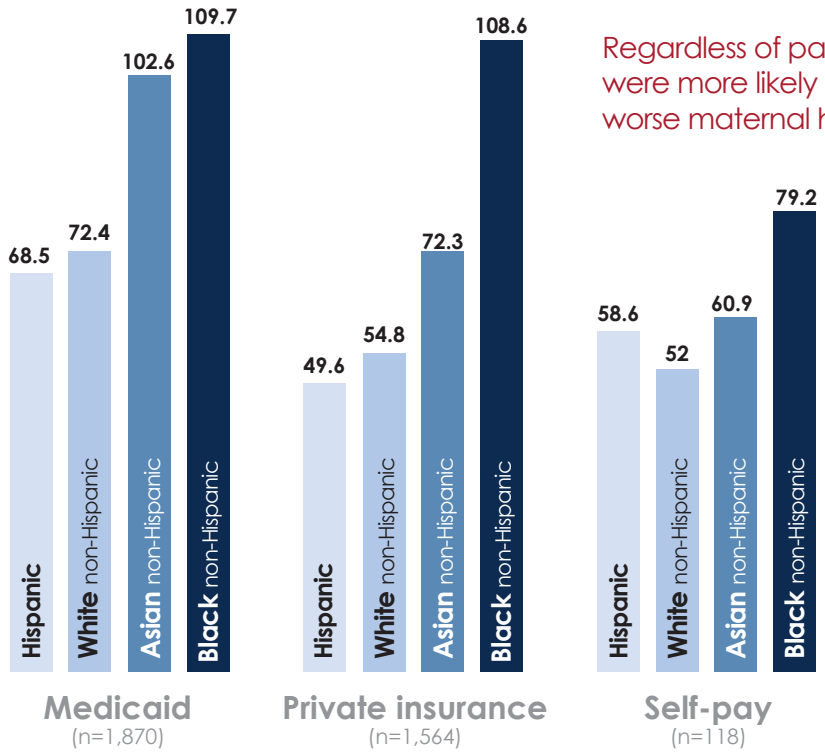
- **Maternal morbidity**. A severe complication with major health consequences that arises during or after labor and delivery.[9] This can include a hysterectomy, being put on a ventilator or receiving a blood transfusion due to excessive blood loss.
- **Maternal mortality**. The death of a woman while pregnant or within 42 days of delivery or loss of pregnancy. Maternal mortality includes any cause related to or made worse by the pregnancy or its management but does not include accidents or incidental causes.[10]

Long-term, toxic stress can create health problems that impact pregnancy.

Repeated exposure to traumatic events can cause toxic stress. Toxic stress activates the body's "fight or flight" response for long periods of time, which harms the body's nervous, endocrine and immune systems.[11] Over time, this "wear and tear" on the body can lead to health issues, such as cardiovascular disease and other conditions that complicate pregnancy.[12] Some sources of toxic stress include:

- **Poverty.** Living in poverty can lead to unpredictable access to resources, like housing, food and health care, as well as social stigma.[13] From 2016-2019, severe maternal morbidity rates were higher for mothers enrolled in Medicaid than those with private or self-pay health insurance.[14] However, poverty alone does not explain disparities in poor maternal health outcomes. Regardless of payor, Black mothers were more likely to experience worse maternal health outcomes (see figure 1).[15]
- **Racism and discrimination.** Discrimination, including experiencing racism, is a type of potentially traumatic life experience linked to poor health outcomes (e.g., cardiovascular disease and hypertension).[16] The impacts of racism and discrimination can accumulate throughout a parent's life and across generations, impacting child health and well-being.[17]
- **Housing.** Living in unaffordable or low-quality housing can contribute to tight finances and/or unhealthy living conditions, which can lead to high blood pressure and other negative health outcomes.[18] On average, 13% of households in urban counties and 11% in Appalachian counties spend over 50% of their income on housing costs (i.e., rent, mortgage, utilities), compared to 9% of Ohioans living in suburban counties and 8% living in rural, non-Appalachian counties.[19] High housing costs restrict parents ability to afford other necessities, such as healthy food and health care.

Figure 1. **Severe maternal morbidity rate per 10,000 delivery hospitalizations, by payor type and race/ethnicity, Ohio, 2016-2019**



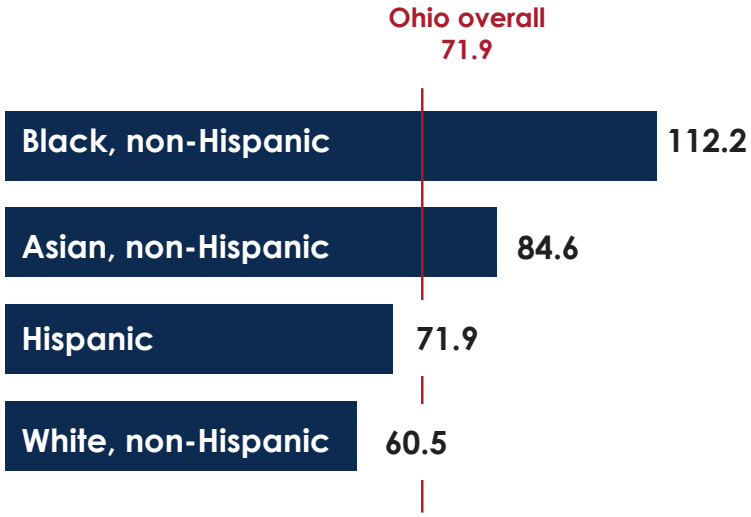
Source: Ohio Hospital Association via Ohio Department of Health Severe Maternal Morbidity and Racial Disparities in Ohio, 2016-2019 Report

Which Ohioans have the highest rates of maternal morbidity and mortality?

From 2008-2017, Black women were more than twice as likely to die from a pregnancy-related cause than white women. The maternal mortality rate for Black women was 29.8 per 100,000 live births, while the rate for white women was 13.7.[20] Additionally:

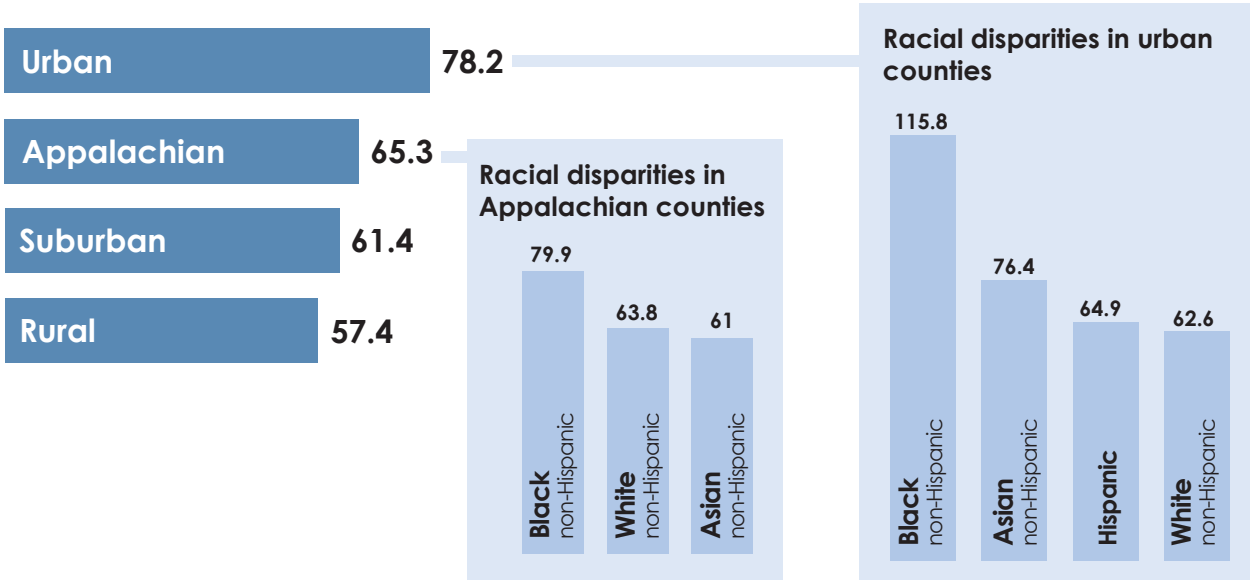
- The severe maternal morbidity rate for Black, non-Hispanic mothers in Ohio was 1.85 times higher than the rate for white women in 2019. Asian, non-Hispanic mothers also have a higher maternal morbidity rate than Ohio mothers overall (see figure 2).
- Urban and Appalachian counties have the highest rates of maternal morbidity in Ohio. Additionally, across both urban and Appalachian counties, Black mothers have the highest rates of maternal morbidity (see figure 3).

Figure 2. **Severe maternal morbidity rate per 10,000 delivery hospitalizations, by race and ethnicity, Ohio, 2019**



Source: Ohio Hospital Association via Ohio Department of Health Severe Maternal Morbidity and Racial Disparities in Ohio Report

Figure 3. **Severe maternal morbidity rate per 10,000 delivery hospitalizations, by county type and race/ethnicity, Ohio, 2016-2019**



Source: Ohio Hospital Association via Ohio Department of Health Severe Maternal Morbidity and Racial Disparities in Ohio, 2016-2019 Report

What works to reduce disparities in maternal morbidity and mortality?

High maternal morbidity and mortality rates are preventable. State and local policymakers have many options to address racism and discrimination, inequitable community conditions, toxic stress and poor prenatal care access. Below are resources for evidence-based strategies to address these drivers and promote maternal health:

- **2020-2022 State Health Improvement Plan.** Strategies to improve health care access, improve community conditions and reduce maternal morbidity.
- **COVID-19 Ohio Minority Health Strike Force Blueprint.** Recommendations to eliminate racial and ethnic disparities in health outcomes and improve overall well-being for communities of color.
- **A New Approach to Reduce Infant Mortality and Achieve Equity.** 127 specific policy recommendations to improve housing, transportation, education and employment for communities at risk of infant mortality.
- **Connections Between Racism and Health**. Framework for action steps that can be taken to eliminate racism and advance equity.

Efforts are already underway to expand access to post-natal care for Ohioans who have recently given birth. On April 1, 2022, the Ohio Department of Medicaid expanded coverage of post-partum care for mothers from 60 days after delivery to one year. Extended coverage ensures that those who have recently given birth are able to receive health care and other services, preventing post-partum morbidity and mortality.[21]

State policymakers and other leaders can continue this work by acting on the following recommendations that address the root causes of disparities in maternal morbidity and mortality:

1. **Dismantle racism and other forms of discrimination and address their consequences.** Acknowledge racism and other forms of discrimination as health crises. Rebuild community trust by eliminating racist and discriminatory policies and practices; implementing policies and practices that promote equity, such as implicit bias trainings; and extending and sharing power with communities of color and urban and Appalachian communities. Tailor programs and policies and allocate resources to meet the needs of Black and Asian, and urban and Appalachian families.
2. **Increase access to high-quality pre- and post-natal care.** Implement policies and programs that promote the health of Ohioans of color and those living in urban and Appalachian areas, including non-emergency medical transportation and financial incentives and community-based training for health professionals and students to serve in rural and underserved areas.
3. **Advance policy changes that improve community conditions.** Recognizing that conditions such as housing, income and toxic stress are foundational to family well-being, implement policy changes that help families of color and families in urban and Appalachian counties maintain stable housing and self-sufficient employment, and reduce experiences of trauma and toxic stress.

Notes

1. Artiga, Samantha et al. *Racial Disparities in Maternal and Infant Health: An Overview*. Kaiser Family Foundation, 2022. https://www.kff.org/report-section/racial-disparities-in-maternal-and-infant-health-anoverview-issue-brief/; see also Improving Access to Maternal Health Care in Rural Communities: Issue Brief. Centers for Medicare & Medicaid Services, 2019. https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/ruralhealth/09032019-Maternal-Health-Care-in-Rural-Communities.pdf
2. "Barriers to Transportation in Rural Areas." Rural Health Information Hub. Accessed April 20, 2022. https://www.ruralhealthinfo.org/toolkits/transportation/1/barriers
3. Health Policy Institute of Ohio. *A new approach to reduce infant mortality and achieve equity: Policy recommendations to improve housing, transportation, education and employment.* Columbus, OH: Ohio Legislative Service Commission, 2017
4. "Car access, Ohio." National Equity Atlas. Accessed April 1, 2022. https://nationalequityatlas.org/indicators/Car_access
5. "Barriers to Improving Rural Maternal Health." Rural Health Information Hub. Accessed April 1, 2022. https://www.ruralhealthinfo.org/toolkits/maternal-health/1/barriers
6. Ibid.
7. Health Policy Institute of Ohio. "Connections between racism and health. Taking action to eliminate racism and advance equity," August 2020; see also Artiga, Samantha et al. *Racial Disparities in Maternal and Infant Health: An Overview*. Kaiser Family Foundation, 2022. https://www.kff.org/report-section/racial-disparities-in-maternal-and-infant-health-an-overview-issue-brief/
8. Ibid.
9. "Severe Maternal Morbidity in the United States." Centers for Disease Control and Prevention (CDC). Accessed March 30, 2022. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html
10. *International Statistical Classification of Diseases and Related Health Problems: Volume 2.* World Health Organization, 2010. https://www.who.int/classifications/icd/ICD10Volume2_en_2010.pdf
11. Shern, David L., Andrea K. Blanch, and Sarah M. Steverman. *The Impact of Toxic Stress on Individuals and Communities: A Review of the Literature*. Mental Health America, 2014.
12. Bucci, Monica et al. "Toxic Stress in Children and Adolescents." *Advanced Pediatrics* 63, no. 1 (2016): 403- 428. doi: 10.1016/j.yapd.2016.04.002
13. Shern, David L., Andrea K. Blanch, and Sarah M. Steverman. *Impact of Toxic Stress on Individuals and Communities: A Review of the Literature*. Mental Health America, 2014.
14. *Severe Maternal Morbidity and Racial Disparities in Ohio, 2016-2019*. Columbus, OH: Ohio Department of Health, 2020.
15. Ibid.
16. Williams, David R., Jourdyn A. Lawrence, and Brigette A. Davis. "Racism and Health: Evidence and Needed Research." *Annual Review of Public Health* 40, no. 1 (2019): 105–25. doi: 10.1146/annurevpublhealth-040218-043750
17. Health Policy Institute of Ohio. "Connections between racism and health. Taking action to eliminate racism and advance equity," August 2020.
18. Health Policy Institute of Ohio. "Taking action: Eliminating racial disparities in infant mortality," January 2021; see also Health Policy Institute of Ohio. "Housing affordability and health equity," April 2021.
19. HPIO analysis of data from the American Community Survey, as compiled by County Health Rankings and Roadmaps. "Severe housing cost burden (percentage of households that spend 50% or more of their household income on housing) for 2015-2019. American Community Survey, 5-year estimates." The U.S. Census Bureau. Accessed September 21, 2021. https://www.countyhealthrankings.org/app/ohio/2021/measure/factors/154/data
20. *Ohio Pregnancy-Associated Mortality Review Program (PAMR)*. Columbus, OH: Ohio Department of Health, 2021. https://odh.ohio.gov/know-our-programs/pregnancy-associated-mortality-review/media/pamrfact-sheet
21. Kroelinger, Charlan D. *Strategies for Improving Maternal Health*. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2019. https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/infantmortality/meetings/12042019/strategies-improvingmaternal-health.pdf