Maternal health equity across race and place

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Objectives

1) To describe maternal health inequities, with a focus on rural residents and Indigenous people.

2) To discuss clinical, public health, and policy efforts that may decrease maternal mortality and improve equity.

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Conflicts of interest

- None.

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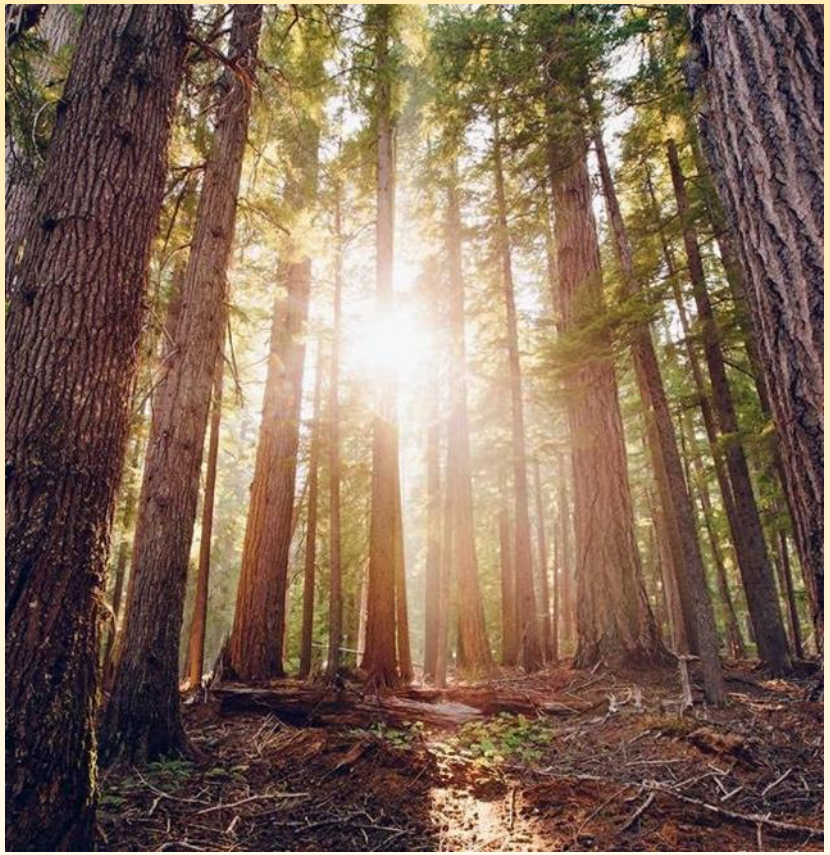
Land Acknowledgment

- I gratefully acknowledge the land I am on as the traditional, ancestral and contemporary territories of the Wahpekute, Anishinaabe, and Očeti Šakówiŋ (Sioux) tribes.
- I recognize the Indigenous people of this land and the knowledge that this land has seen. I encourage everyone to be respectful of the distinctive and permanent relationship that exists between Indigenous people and their traditional territories.



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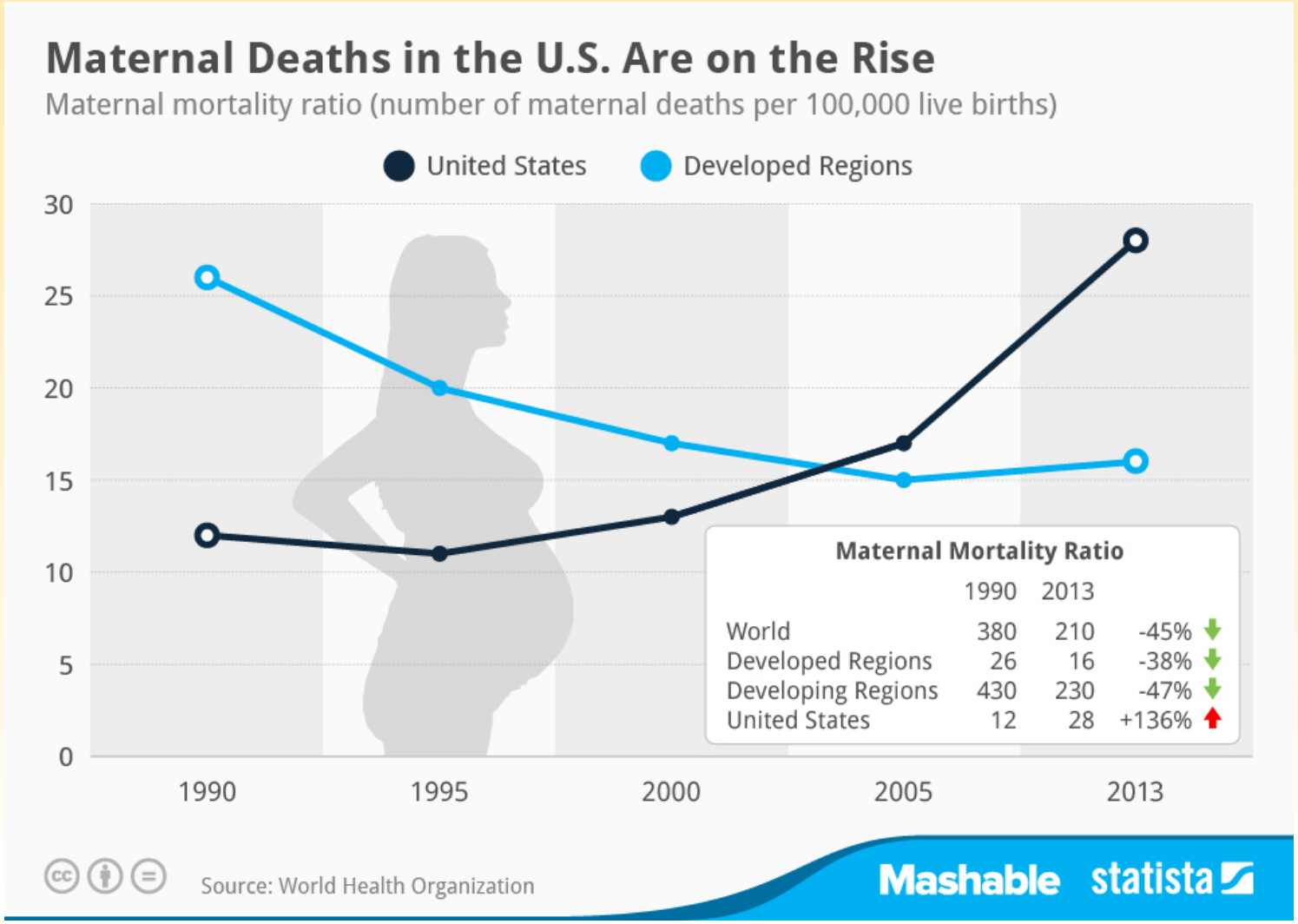
Maternal health: In Alaska and across the US, too many moms are dying



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Alaska context

- Highly rural, long distances
- High proportion of Indigenous people
- Important role for Medicaid

- So, what do we know about the nation, and what does that say about Alaska?

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Racial inequities

Where racism meets childbirth

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Racial inequities in maternal health

<u>CDC data, released May 2019</u>

For 2011-2015:

about 1/3 of deaths (31%) happened **during pregnancy**;
about 1/3 (36%) happened **at delivery or in the week after**; and
about 1/3 (33%) happened **1 week to 1 year postpartum**.

Black and American Indian/Alaska Native people were about 3 times as likely to die from a pregnancy-related cause as White people.

But in 2018 data, there was no information separately reported for Indigenous people.

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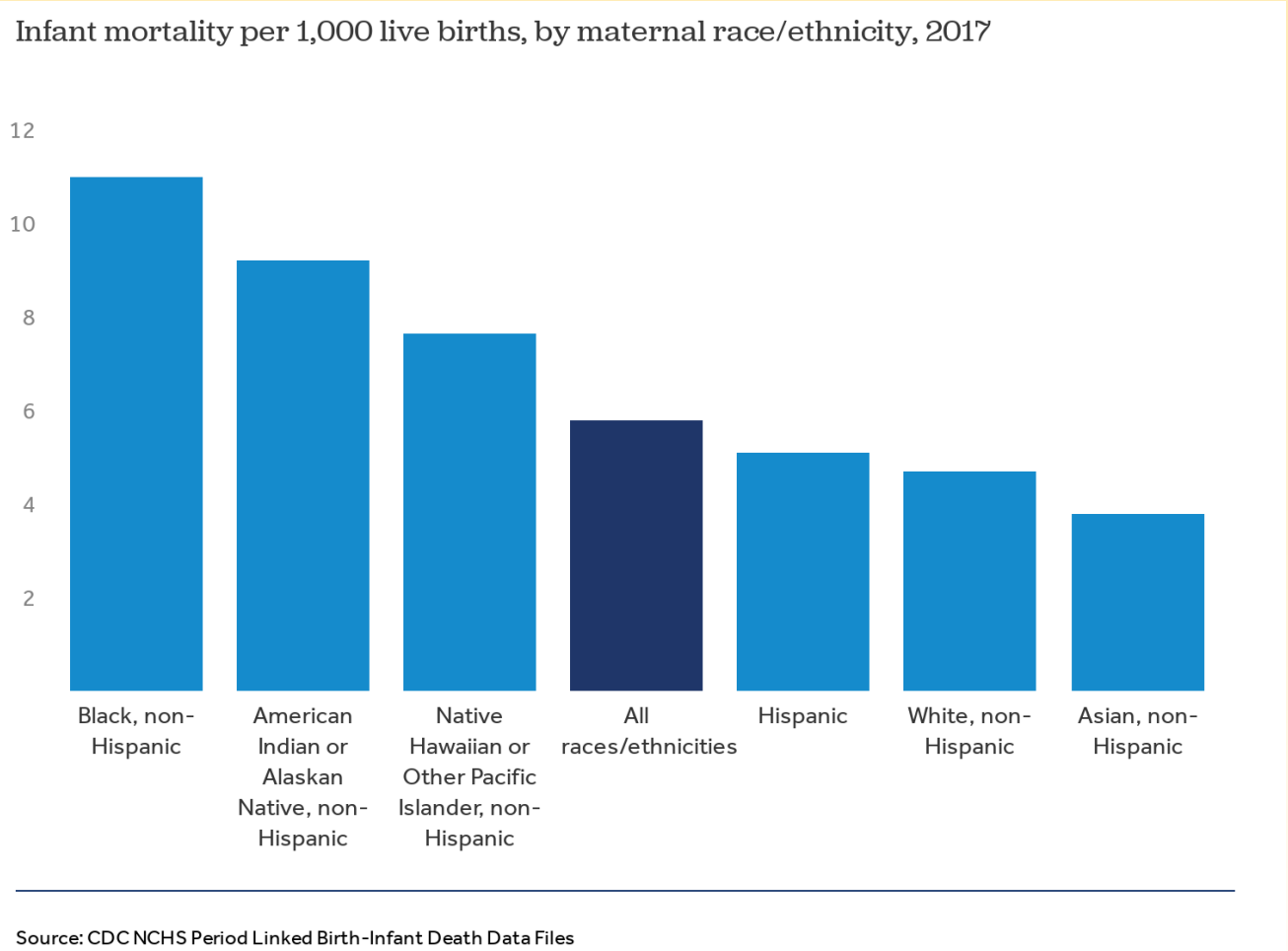
Racial inequities in infant health



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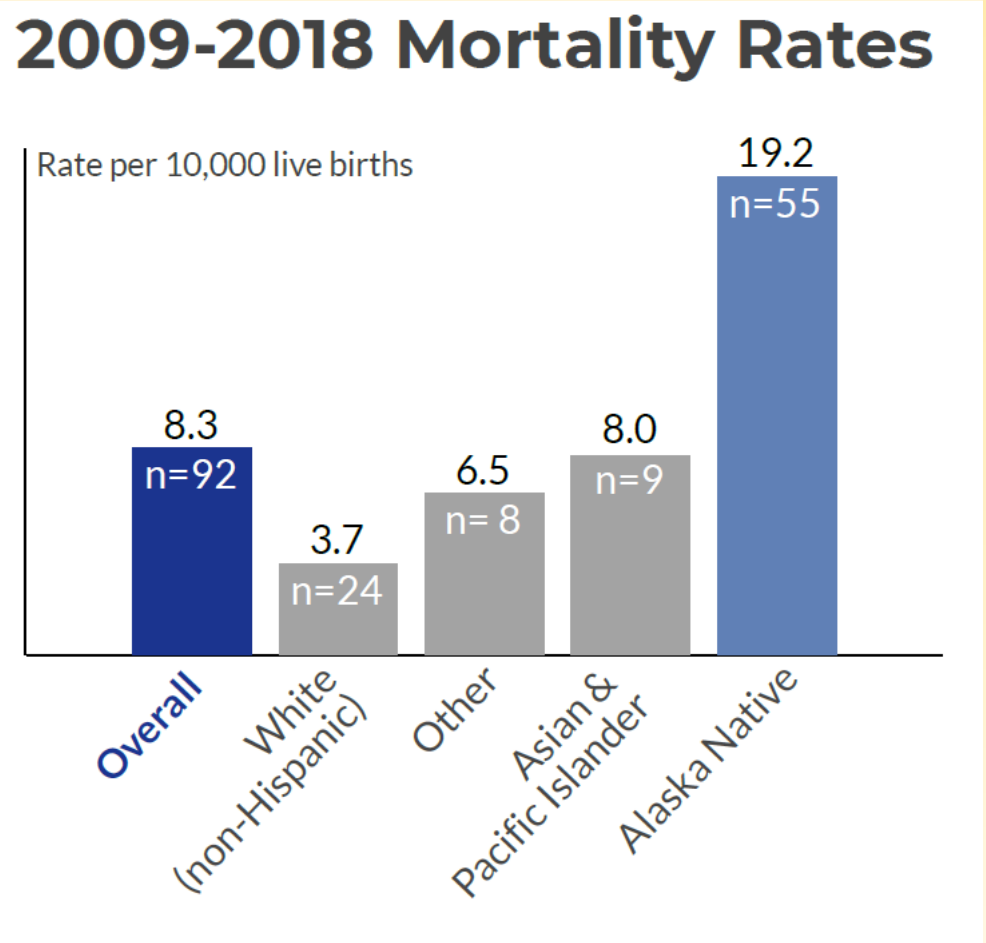
Racial equity in Alaska

Racial demographics of birthing people:

- White: 50%
- Black: 3%
- American Indian or Alaska Native: 19%
- Asian: 6%
- Native Hawaiian or Other Pacific Islander: 3%
- Hispanic: 8%



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Defining racism *(Dr. Camara Jones, AJPH 2010)*

- **Interpersonal:** Includes prejudice (assumptions) and discrimination (actions); Can be intentional or unintentional.
- **Internalized:** Acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth
- **Structural:** Differential access to the goods, services, and opportunities of society by race. Institutionalized racism is normative, sometimes legalized, and often manifests as inherited disadvantage.

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Moving toward racial equity

- Structural problems require structural solutions

- Resources:
  - AIM Bundle on Reducing Peripartum Racial Disparities
  - Black Mamas Matter Alliance
  - National Birth Equity Collaborative
  - Crear-Perry J, Correa-de-Araujo R, Lewis Johnson T, McLemore MR, Neilson E, Wallace M. Social and Structural Determinants of Health Inequities in Maternal Health. J Womens Health. 2021 Feb;30(2):230-235.

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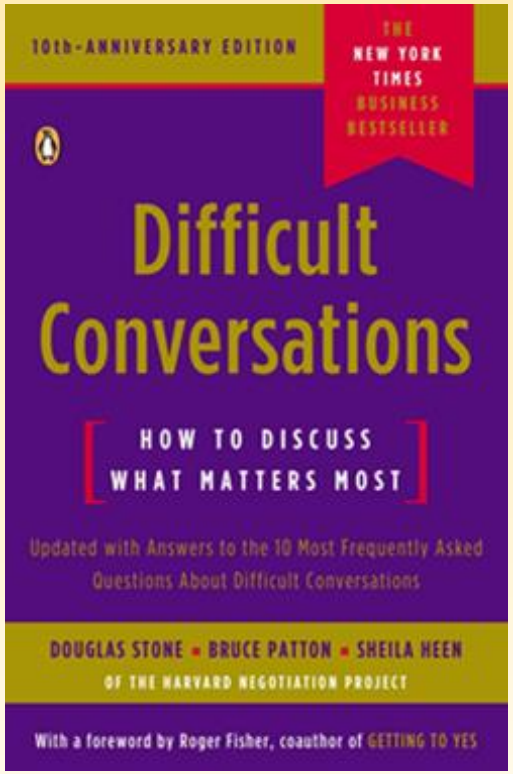
Distinguishing intention from impact

- In combatting racism, impact matters. If you receive information that your impact does not match your intention, it is a gift, not a condemnation of your character



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Geographic inequities

The importance of intersectionality, and a deeper dive into some of my team's research

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Geographic inequities in maternal and infant health

Maternal and Infant Mortality Rates Are Highest in Rural America

According to publicly available data from the U.S. Centers for Disease Control and Prevention analyzed by *Scientific American*, women living in rural areas of the U.S. have significantly higher chances of dying from causes related to pregnancy or childbirth compared with their city-dwelling counterparts. Likewise, babies are more likely to die before their first birthday if they live in rural locations. The graphs below reflect 2015 data.

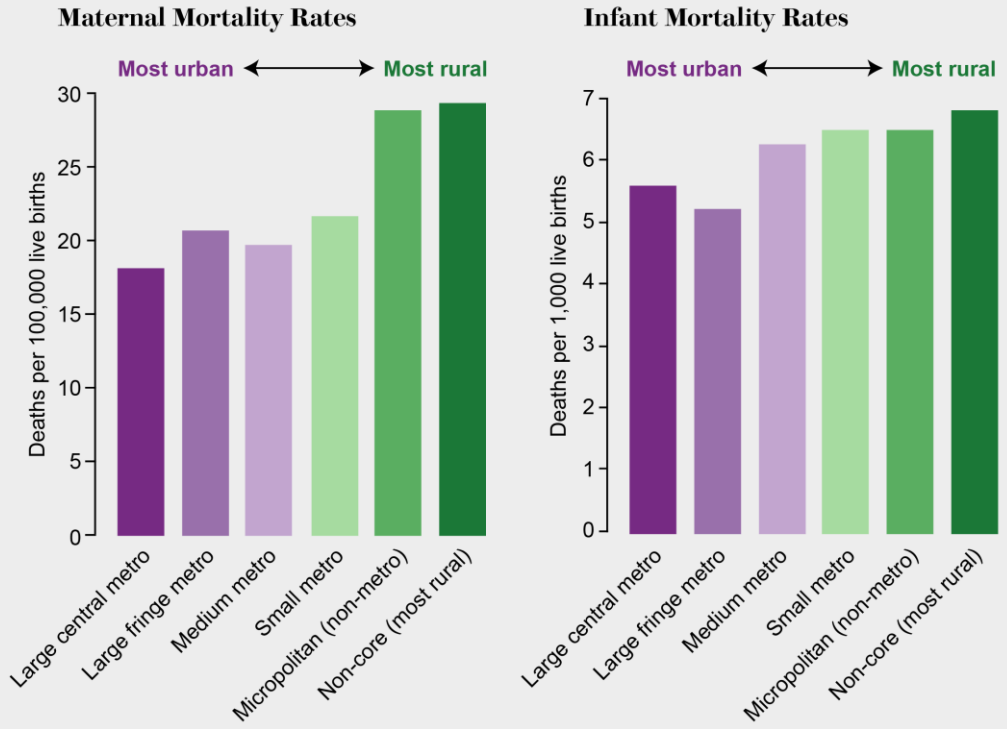
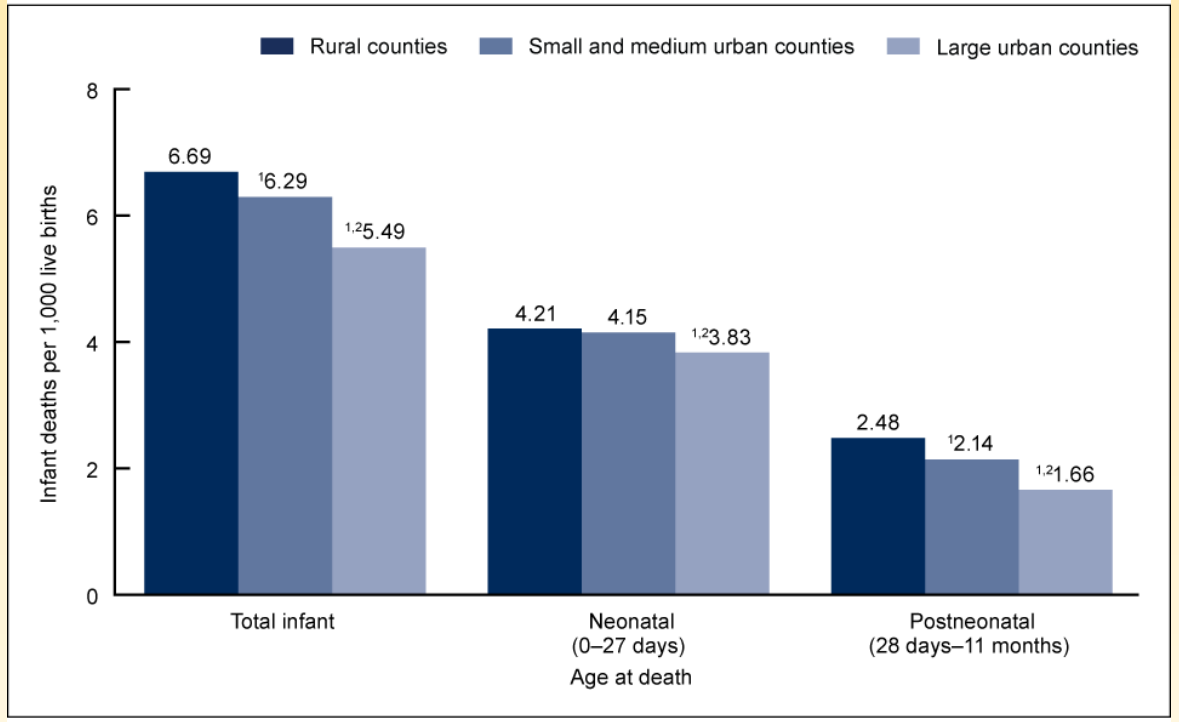


Figure 1. Total infant, neonatal, and postneonatal mortality rates, by urbanization level: United States, 2013–2015



[1]Significantly different from rural counties ($p < 0.05$).
[2]Significantly different from small and medium urban counties ($p < 0.05$).
NOTES: County designation is based on mother's county of residence as reported on the birth certificate. County classification is based on the 2013 NCHS Urban–Rural Classification Scheme for Counties.
Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db300_table.pdf#1.
SOURCE: NCHS, National Vital Statistics System, linked birth/infant death data set.

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Geographic realities in Alaska

- Approximately 1/3 of Alaskans live in rural communities
  - Nationally, it's 1/5
- 80% of Alaska communities are accessible only by boat or plane

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Does maternal morbidity and mortality differ for rural and urban residents?

- Ensuring good maternal health is especially challenging for rural communities, which face declining access to obstetric services.

- Using national hospital discharge data for 2007–15, we analyzed severe maternal morbidity and mortality in births among rural and urban residents.

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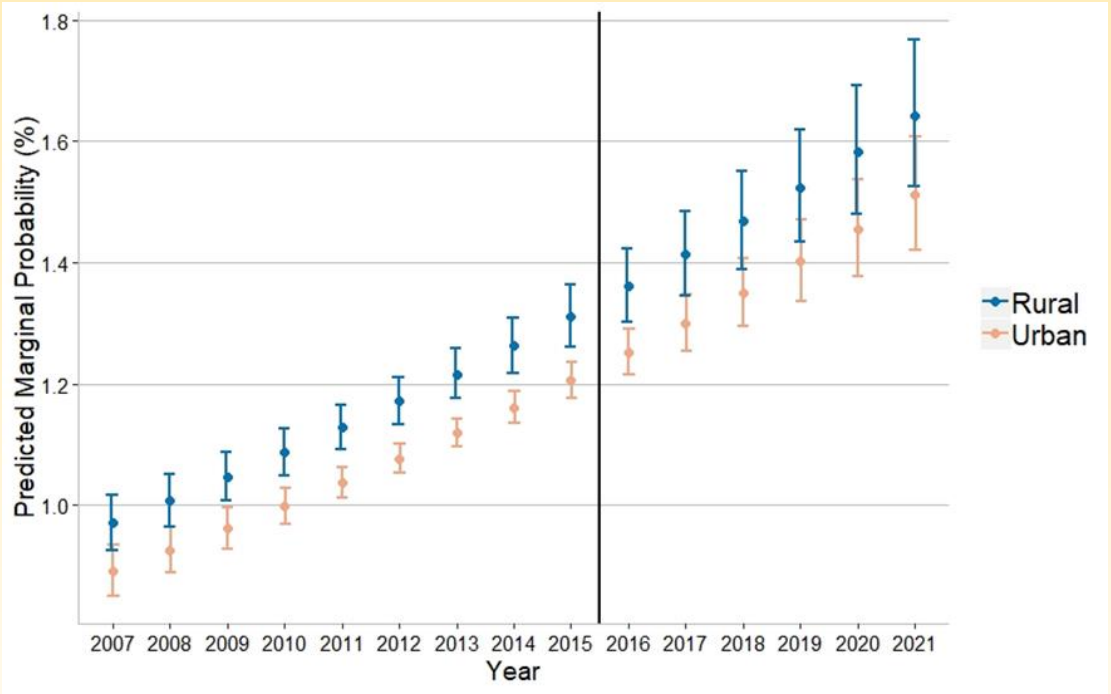
Geography affects maternal health risks.

- Severe maternal morbidity and mortality has been increasing among both rural and urban residents (109 per 10,000 childbirth hospitalizations to 152 per 10,000).

- Rural residents had a 9 percent greater chance of experiencing severe maternal morbidity and mortality, compared with urban residents.

  ~4,378 cases of SMMM among rural residents who would not have experienced this had they been living in urban areas.

Exhibit 3. Predicted marginal probabilities of severe maternal morbidity and mortality among rural and urban residents, United States 2007-2015 (N = 6,793,342)



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But high quality, equitable care is more than just "Did they survive childbirth?"

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Losing access to obstetric care in rural places

The people who know the right questions are those closest to the problem.

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Rural obstetric care access, 2004-2014

- More than half of rural counties have no hospital-based obstetrics services
  - 9% of rural counties lost OB services between 2004-2014
  - Most vulnerable communities: Black, low-income, shortage areas, remote, less generous Medicaid programs

- The Alabama grannies were right.

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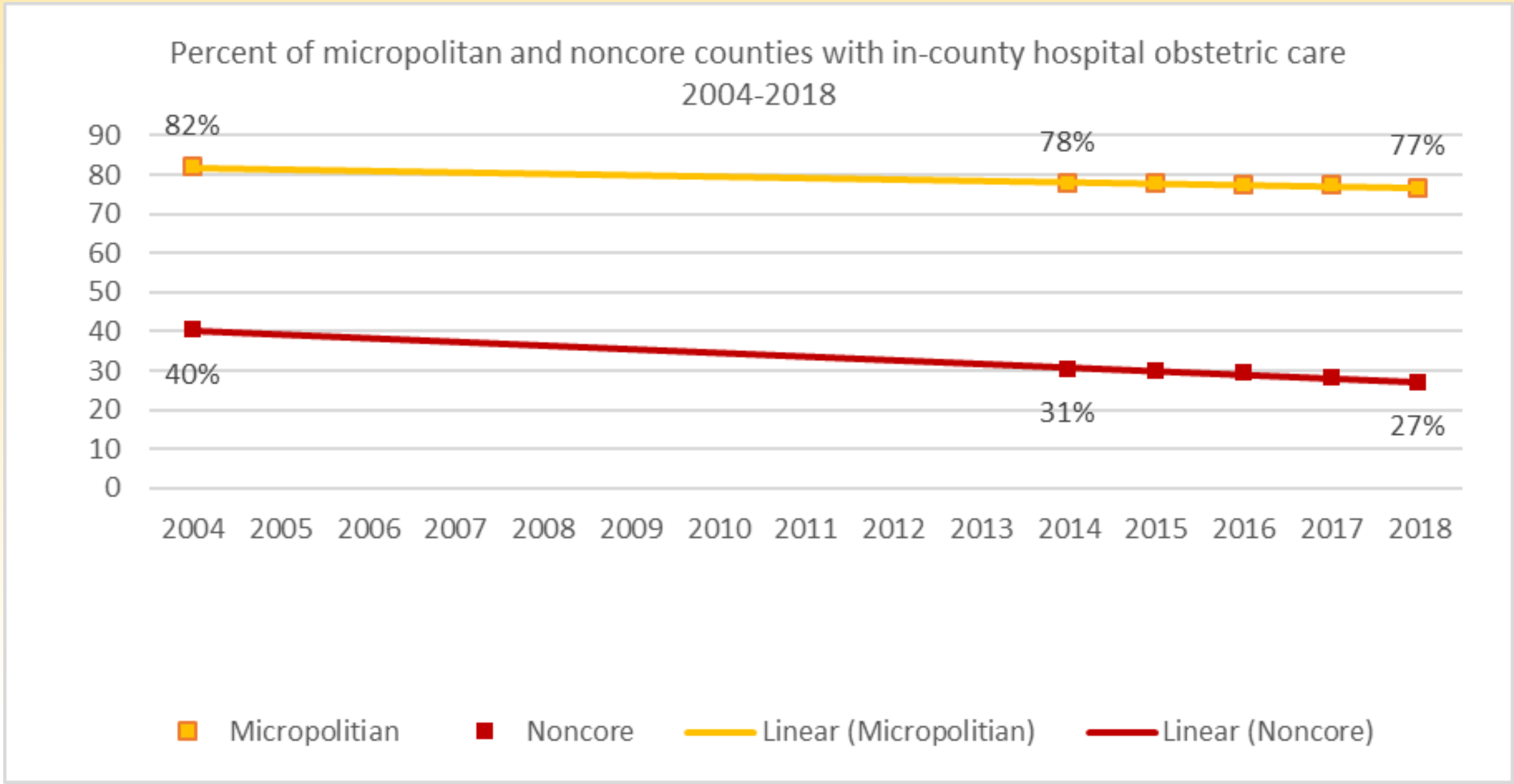
Since 2014, there have been continued declines



Findings, 2014-2018

- 53 rural counties (2.7%) lost hospital-based obstetric services, in addition to the 1,045 counties (52.9%) that never had OB services during the study period
- OB services losses were most frequent in rural noncore counties (3.5% overall lost services), where 69% of counties already had no OB care.
  - These included 3 counties with hospital closures and 52 counties where hospitals remained open but closed their obstetric units.

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Two major trends

- First, the least-populated rural areas adjacent to urban areas (noncore urban-adjacent counties) were least likely to have local obstetric services.
- Second, the least populated, most remote rural counties (noncore non-urban-adjacent) experienced the greatest reduction in obstetric service availability during 2014-2018.

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What are the consequences of losing hospital-based obstetric services?

Why does this matter? What does it mean?

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After losing obstetric services…

- Rural counties that are not adjacent to urban areas had higher rates of preterm birth, out-of-hospital birth, and emergency births in hospitals without obstetric units.
- In rural counties next to urban areas, there was also an increase in emergency births in hospitals without obstetric units, although this declined as time went on.

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Mitigating these consequences

- Preterm birth – regionalization, screening, general women's health, access to care and insurance, SDOH
- Emergency births – emergency OB resources and protocols, funding for first responder + community training, following international examples (Australia)
- Out of hospital births – integration into maternal levels of care, data sharing, following international examples (British Columbia)

Maternal health at the intersection of race and place

What happens to folks who experience racism in rural places?

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Indigenous people

- In 2018, 40% of Americans believed that Native American/Alaska Native people no longer existed.
- Reality:
  - 574 federally recognized tribes
  - 5.2 million Indigenous people in the US
  - Disproportionate risk across the lifespan
  - 40% of Indigenous people are rural

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How does maternal morbidity and mortality risk vary by geography for Indigenous vs white people?

- Goal: describe severe maternal morbidity and mortality among Indigenous vs. non-Hispanic white people
- Methods: 2012-2015 maternal hospital discharge data (National Inpatient Sample)
  - Comparing across race and geography (rural vs. urban residents)

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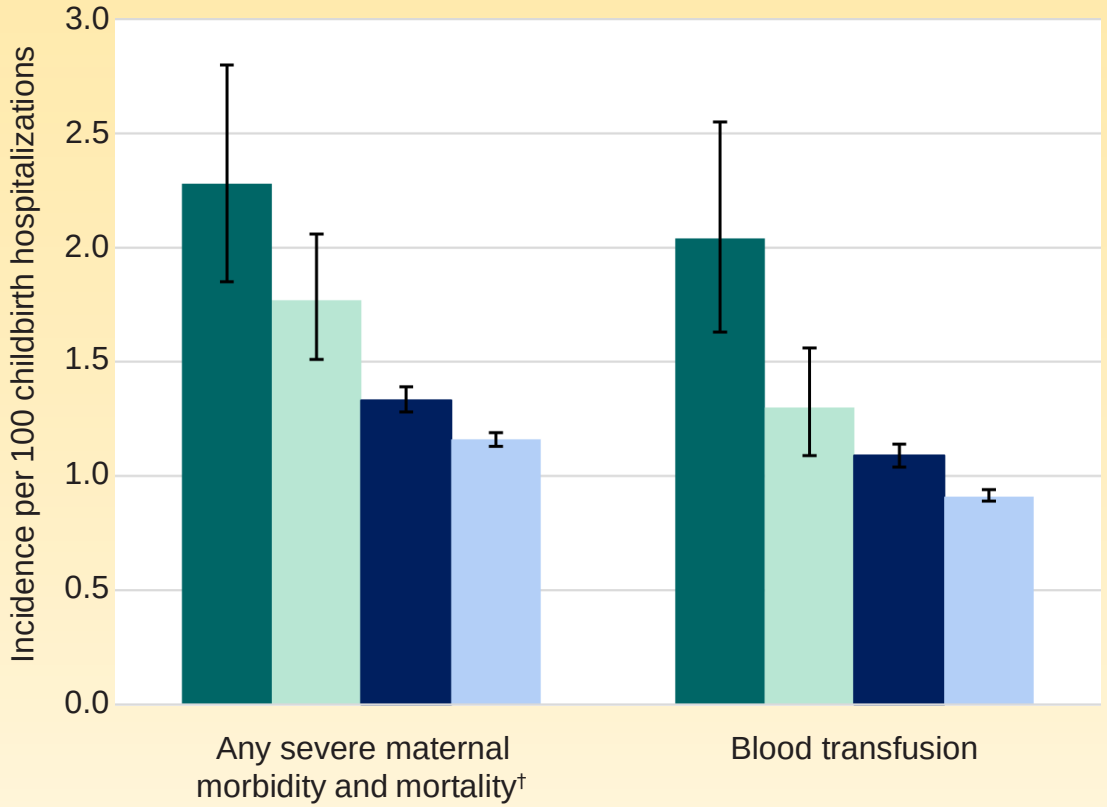
Findings

- N=7.5 million
  - 101,493 Indigenous
  - 7,460,236 white
- SMMM incidence rates
  - 2.3% rural Indigenous
  - 1.8% urban Indigenous
  - 1.3% rural white
  - 1.2% urban white



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Implications and context

- Loss of life in Indigenous communities has deep cultural and historical resonance
- Maternal and infant risks are elevated; financial and partner stress are predictive of outcomes.
- But risk is not destiny:
  - Based on the data from our study, if Indigenous people experienced the same risk as non-Hispanic white people, there would be a 43.9% reduction in SMMM.

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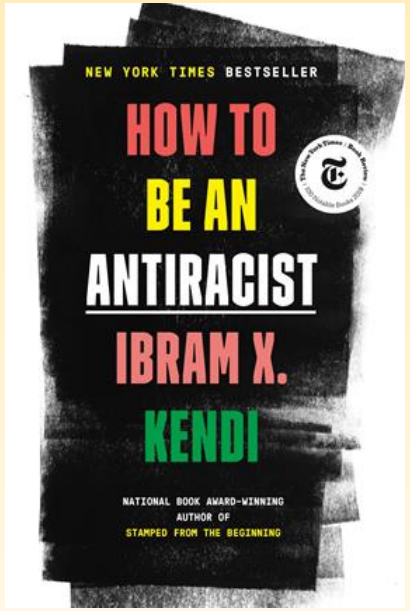
Policies matter for improving equity.



"Americans have long been trained to see the deficiencies of people rather than policy… We are particularly poor at seeing the policies lurking behind the struggles of people."

-Ibrahm X. Kendi

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Clinical and policy solutions

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The goal for Alaska

- Workable solutions to the challenges that individuals and communities face to ensure maternity care **access** and **quality**

- Actions and policies to improve maternal health **equity**

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How? Shared power

Strong, strategic, long-term, and trusting relationships with all partners (e.g. clinicians, patients, community leaders, administrators, payers) are vital to advancing health equity and transforming reality in public health and medicine. These relationships must recognize each other's strengths, be rooted in shared values and interests, share decision making, and allow for authentic participation by those facing inequities.

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Tool: Equity Manifesto

- "It begins by joining together, believing in the potency of inclusion, and building from a common bond…"

https://www.policylink.org/about-us/equity-manifesto

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Key principles to improving maternal health equity across race and place

- Impact>intention
- Policy solutions to structural problems
- Shared power

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Implications for policy and practice

Policy recommendations

1. Representation on MMRCs and other policy bodies.
2. Ensure funding to address access, care coordination, and community preparedness.
3. Medicaid policy reform: increase reimbursement, expand eligibility, cover non-clinical support services.

Clinical recommendations

1. Include rural and BIPOC people in development of guidelines/strategies.
2. Ensure that rural and BIPOC patients can communicate concerns.
3. Focus on blood transfusion capacity.

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Recommendations to improve rural and Indigenous maternal health

1. Collecting and reporting data with and among Indigenous people and tribal nations
2. Ensuring decision-making includes Indigenous, rural, and tribal representation
3. Making money available to community-based groups.
4. Improving workforce diversity.
5. Paying attention to violence as a maternal health issue.

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Success stories

- Inukjuak, Quebec: Inuit midwives
- Diné practice: Changing Woman Initiative

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Discussion

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Questions

- How do these data illuminate challenges you see in your policies, programs, communities and practices?
- What don't we know that we need to know?
  - What is missing from this talk that you need to know to make changes in your practice, community, or institution/organization?
- How do you incorporate the 3 key principles in your work?
- What are changes that you can make now?
- What can you commit to doing?

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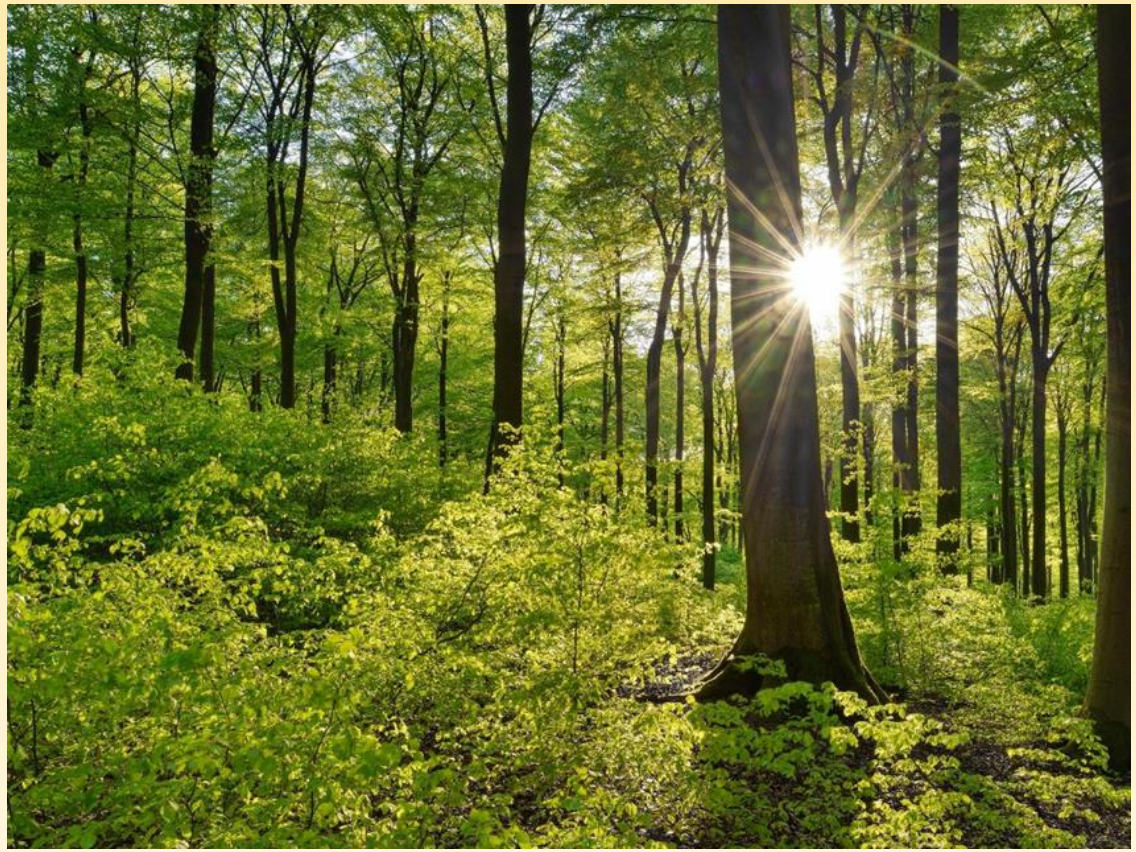
"All that you touch, You Change. All that you Change, Changes You. The only lasting truth is Change."

-Octavia E. Butler



Thank you.

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Extra slides

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MMRCs as a policy tool

- Collect data and analyze information to try to understand factors related to maternal death
  - Health care and clinical factors
  - Social determinants of health

- Wide variability across states

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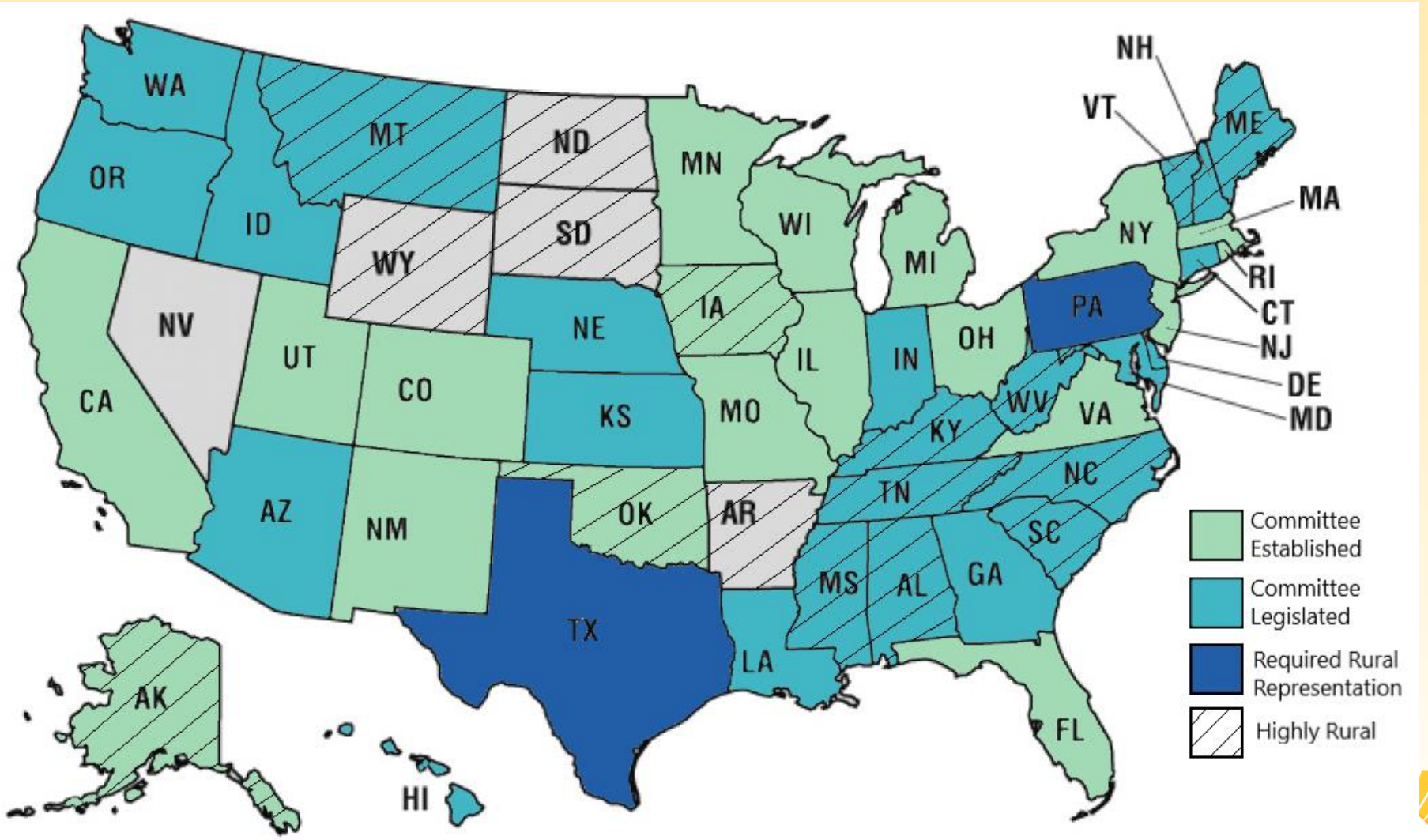
The importance of representation for equity

- Who is at the table matters
- Ensuring representation on MMRCs of affected communities is essential
  - People who have experienced maternal morbidity and family members of those who have died
  - Racial and ethnic diversity
  - Rural representation

MMRCs as of December 2018



- 18 highly rural states
  - 14 MMRCs established
  - 11 legislated
  - 5 required representation
  - 0 required rural representation

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Lack of focus on rural residents in MMRCs

- To date, MMRCs have limited focus on rural residents and their unique health care needs/challenges
  - 90% of all states / 78% of highly rural states had MMRCs
- Rural residents have:
  - Higher rates of maternal and infant mortality
  - More limited access to maternity-related health services (rural hospital and obstetric unit closures)
  - Less likely to obtain preventive care (higher uninsurance, greater access constraints)

Importance of rural inclusion in MMRCs

- Data should be analyzed separate for rural residents
  - Identify unique risk factors
  - Risks to rural residents could be hidden in average statistics by urban populations
- Rural perspectives could strengthen work of MMRCs
  - Identify how needs and resources vary from urban
  - Inform prevention and planning activities
  - Identify issues and improve quality

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