



**Accelerate Upstream Together
to Improve Perinatal Health and Achieve Equity**
Nebraska Perinatal Quality Improvement Collaborative Summit
September 27, 2024

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Vision: Healthy Communities, Healthy People



Paradigm for Improving Perinatal Health



Accelerate

Hasten pace of change, innovate, & build evidence



Upstream

Promote prevention and a life course approach



Together

Collaborate, include voices of partners and people we serve

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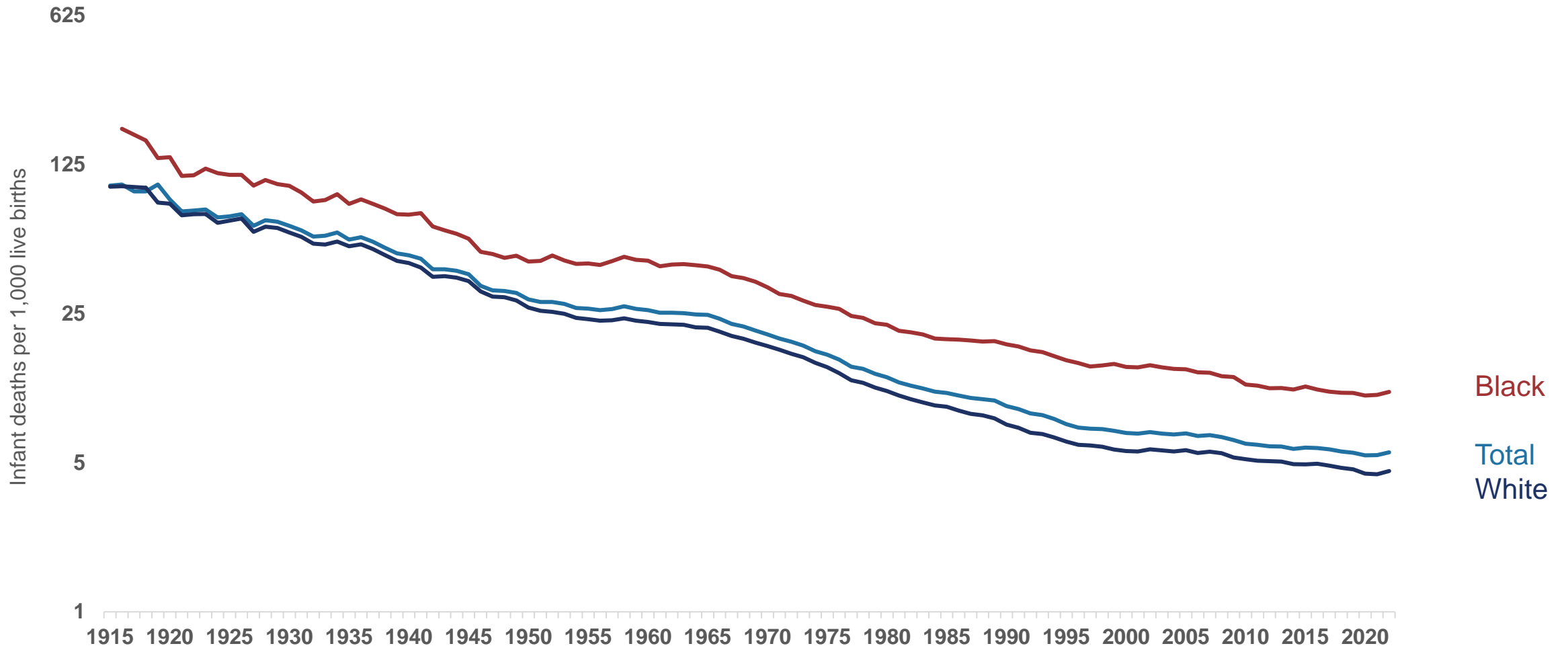


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Infant Mortality Trends and Disparities, 1915-2022

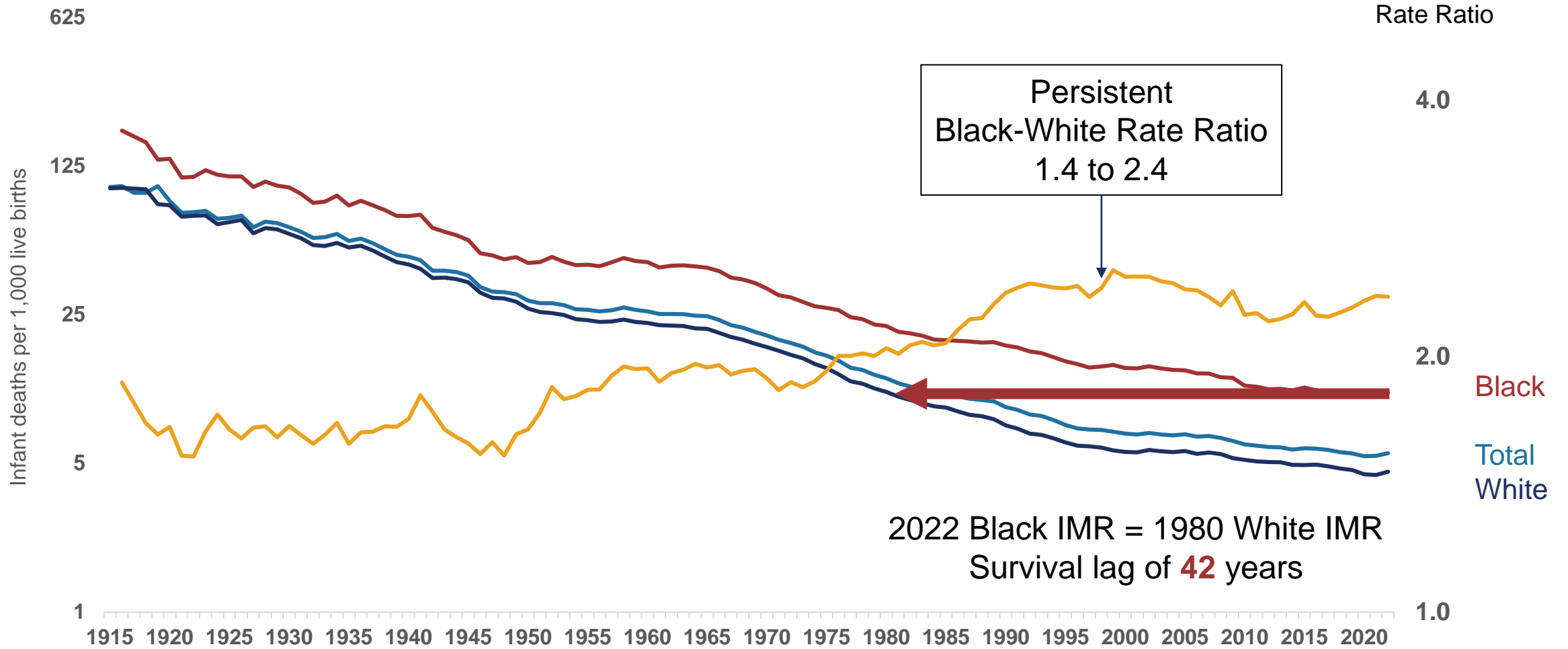


SOURCE: National Vital Statistics System; data from 1915-1932 are a subset from states with birth registration, which became 100% by 1933

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Infant Mortality Trends and Disparities, 1915-2022

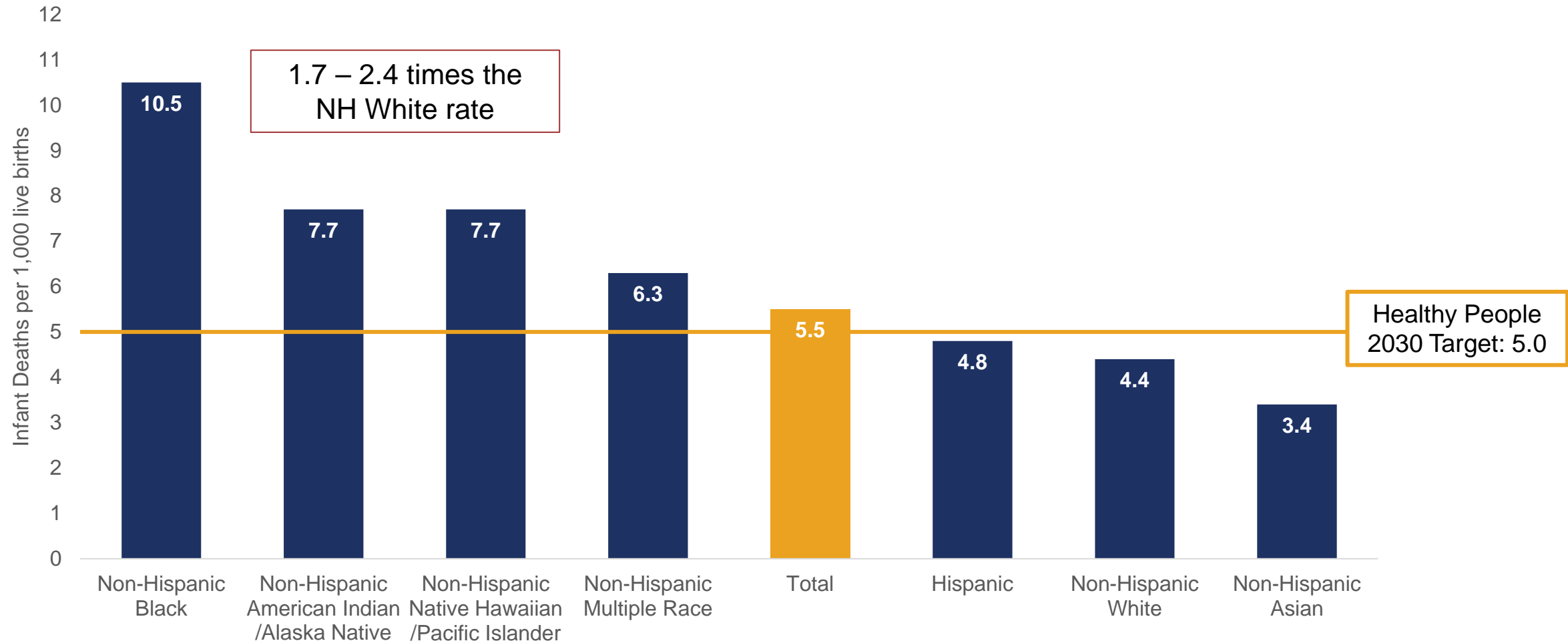


SOURCE: National Vital Statistics System; data from 1915-1932 are a subset from states with birth registration, which became 100% by 1933

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Infant Mortality Disparities, 2019-2021 United States

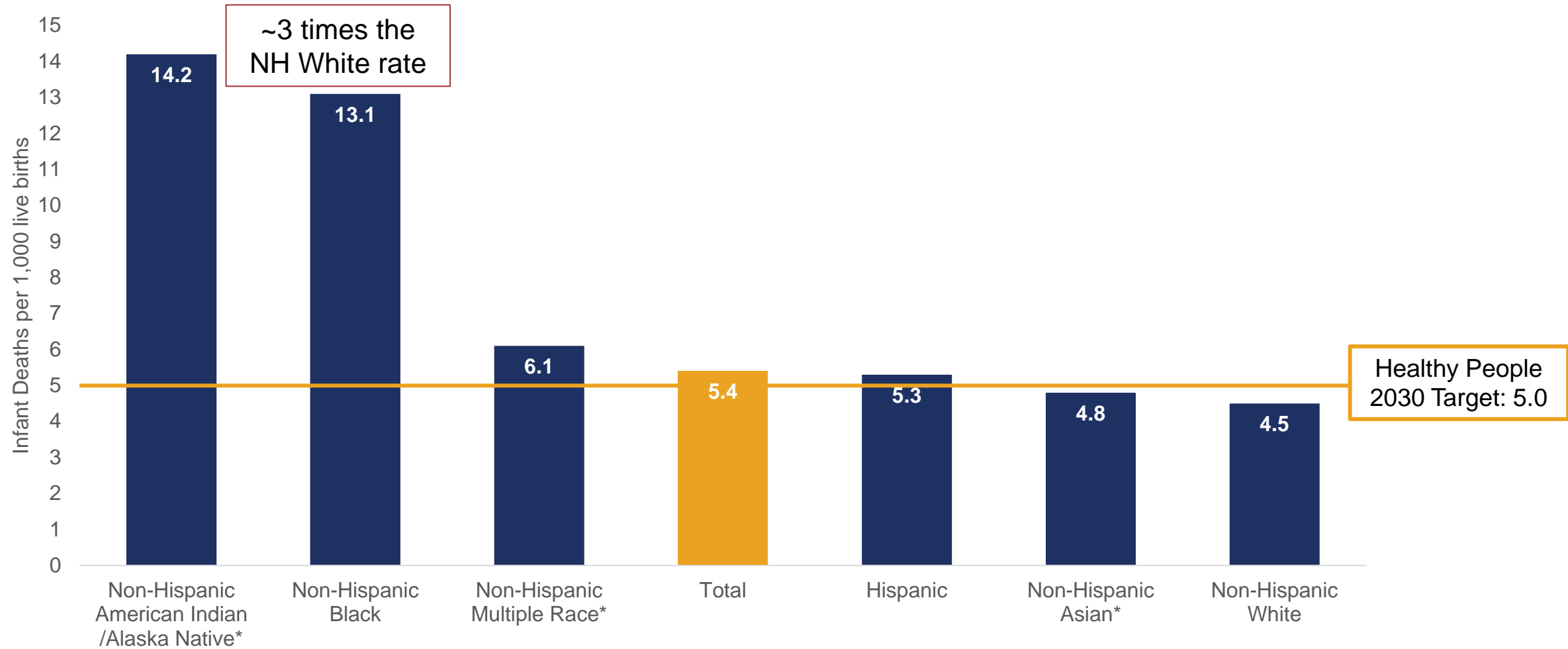


SOURCE: National Vital Statistics System, Linked Birth / Infant Death File

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Infant Mortality Disparities, 2019-2021 Nebraska



SOURCE: National Vital Statistics System, Linked Birth / Infant Death File

*Uses 5-year data (2017-2021) to improve reliability for smaller populations

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Where Do We Go From Here?

Improve overall outcomes

Ultimately, we want to prevent every infant death possible.

&

Reduce disparities

Given the large and persistent racial disparities, we need to accelerate efforts to achieve equity now.

Infant Mortality – United States

What Would It Take to Reach HP Target and Achieve Equity?

We need to make policy and system changes that make it possible for an additional...

Infant Mortality Rate (per 1,000)	Reduction to Reach HP Target (Subtract 5.0)	Annual Infant Deaths Needed to Prevent (Multiply by Births/1,000)
5.5	0.5	1,768

Population	Infant Mortality Rate (per 1,000)	Reduction to Achieve Equity (Subtract 4.4)	Annual Infant Deaths Needed to Prevent (Multiply by Births/1,000)
NH Black	10.5	6.1	3,244
NH AI/AN	7.7	3.3	89
NH NHPI	7.7	3.3	31

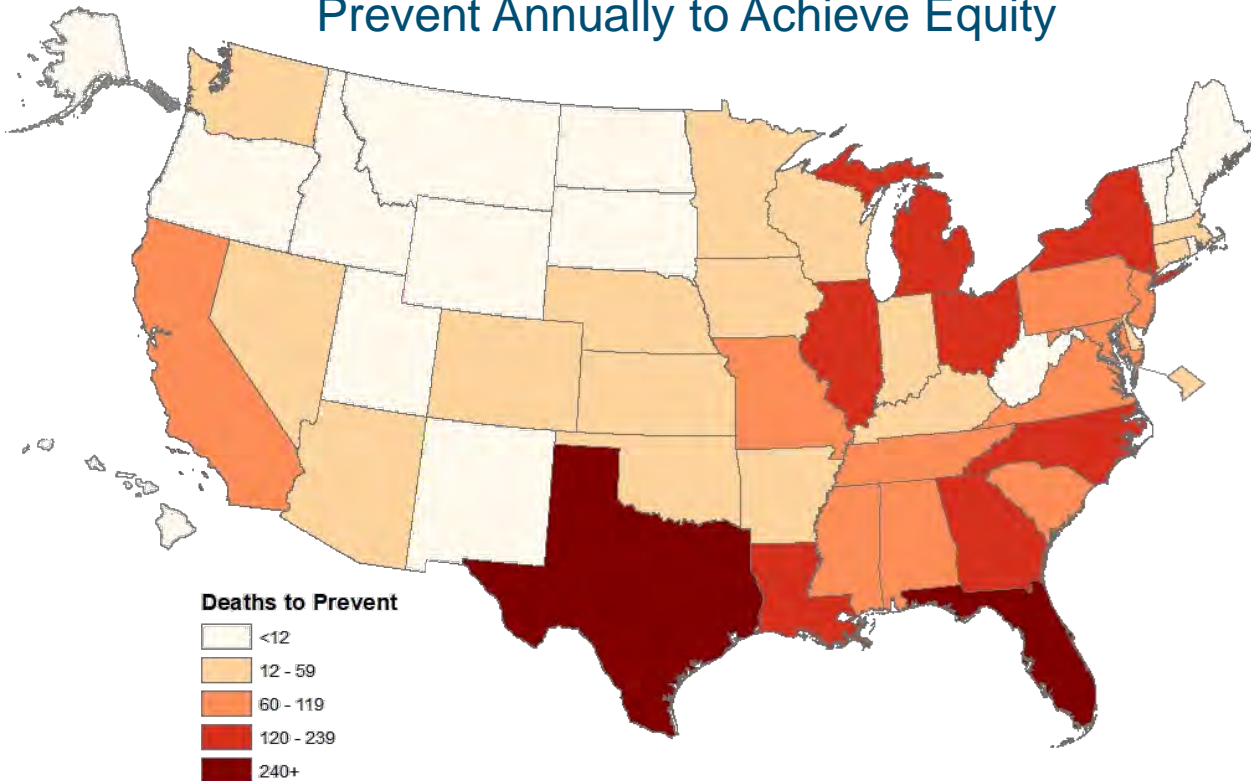
HP Target: 1,768 babies to reach their first birthday.
That's ~5 babies/day

Equity: 3,364 babies to reach their first birthday.
That's ~10 babies/day



What Can States Do to Achieve Infant Health Equity?

Number of Black Infant Deaths to Prevent Annually to Achieve Equity



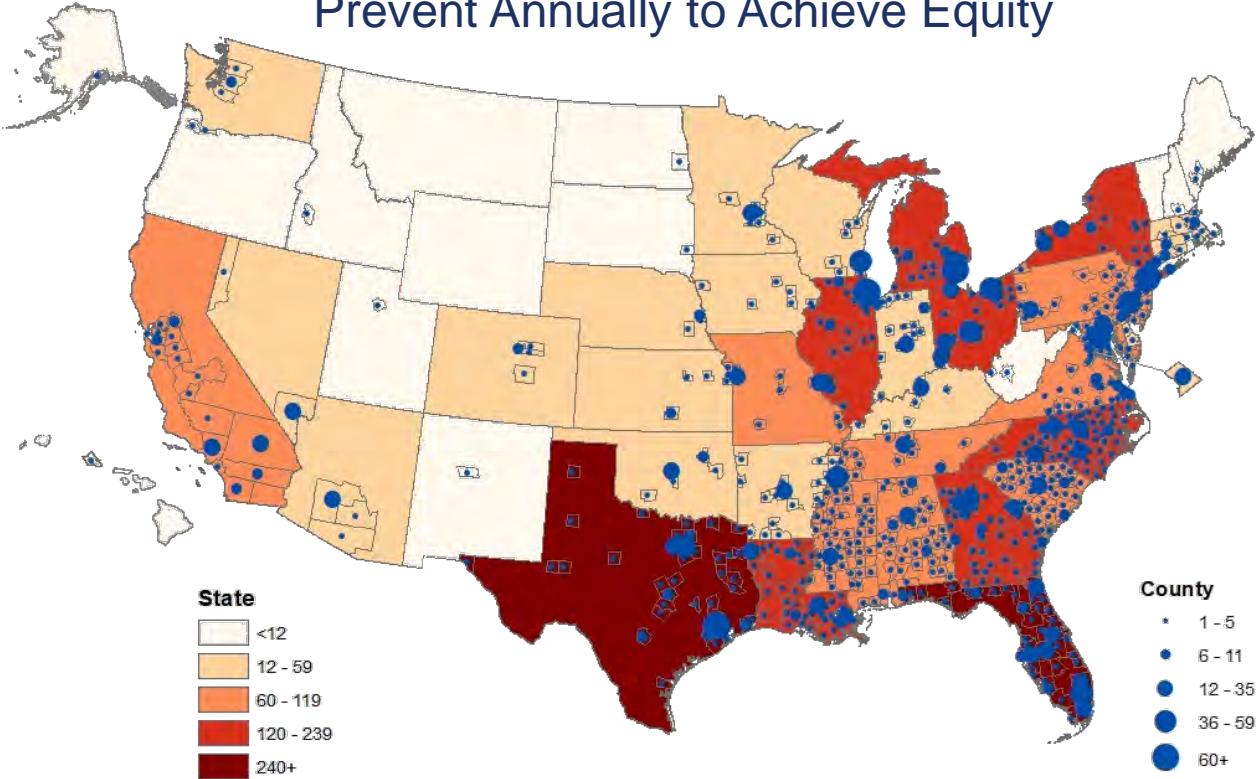
To Achieve Equity		
Black Infant Deaths to Prevent Annually	# States	% of Total Black Infant Deaths to Prevent
<12	18	1%
12-59	17	14%
60-119	10	30%
120-297	9	54%

SOURCE: National Vital Statistics System, Linked Birth / Infant Death File (2019-2021) with spatial smoothing to enable estimation of rates based on small numbers

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What Can Counties Do to Achieve Infant Health Equity?

Number of Black Infant Deaths to Prevent Annually to Achieve Equity



To Achieve Equity		
Black Infant Deaths to Prevent Annually	# Counties	% of Total Black Infant Deaths to Prevent
1-11	633	49%
12-35	60 counties account for half of all deaths needed to prevent	
36-59		
60-103		

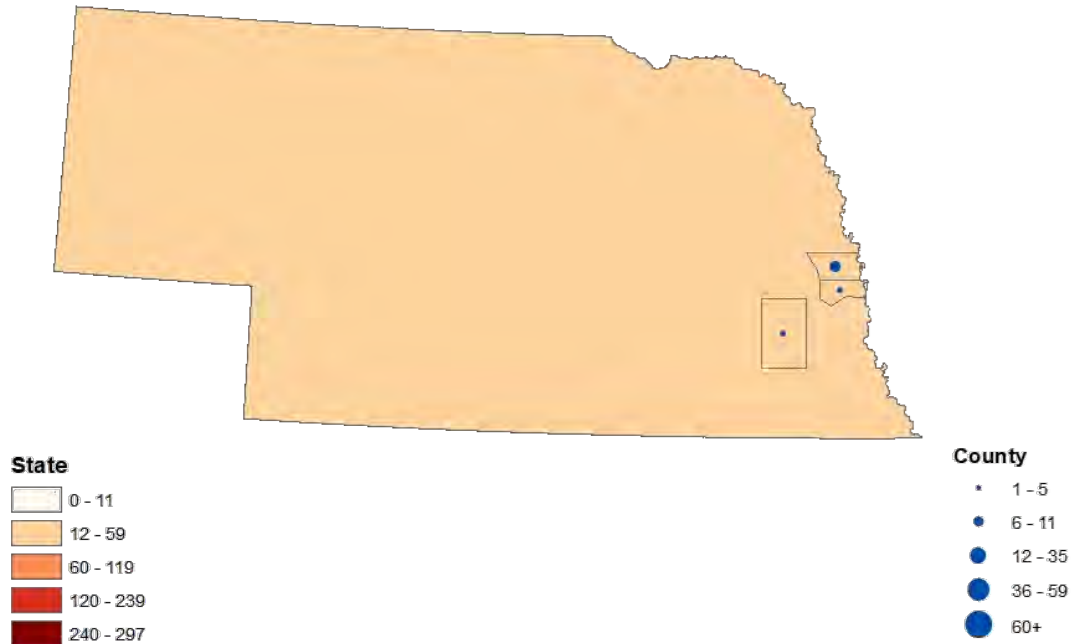
SOURCE: National Vital Statistics System, Linked Birth / Infant Death File (2019-2021) with spatial smoothing to enable estimation of rates based on small numbers; 451 counties had no Black births and 1,063 counties had too few births to expect at least one death due to disparity per year.

Learn more at <https://mchb.hrsa.gov>



What Can Nebraska Do to Achieve Infant Health Equity?

Number of Black Infant Deaths to Prevent Annually to Achieve Equity



To Achieve Equity		
County	Black Infant Deaths to Prevent Annually	% of Total Black Infant Deaths to Prevent
Douglas	8	67%
Lincoln	1	8%
Sarpy	1	8%
Nebraska	12	100%

SOURCE: National Vital Statistics System, Linked Birth / Infant Death File (2019-2021) with spatial smoothing to enable estimation of rates based on small numbers; 55 counties had no Black births and 35 counties had too few births to expect at least one death due to disparity per year.

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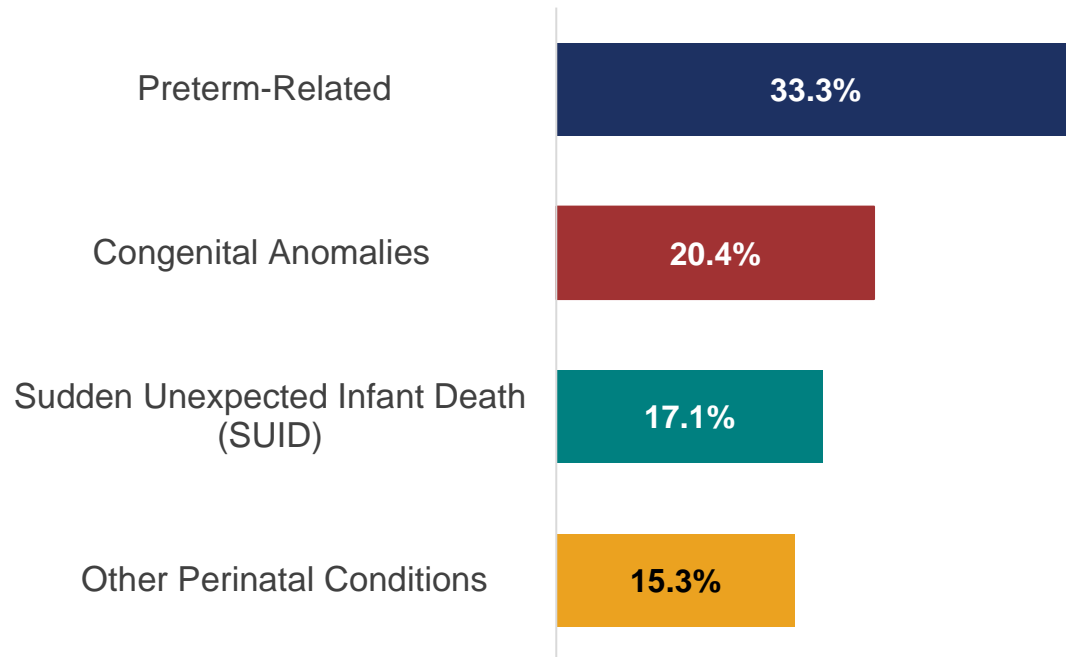
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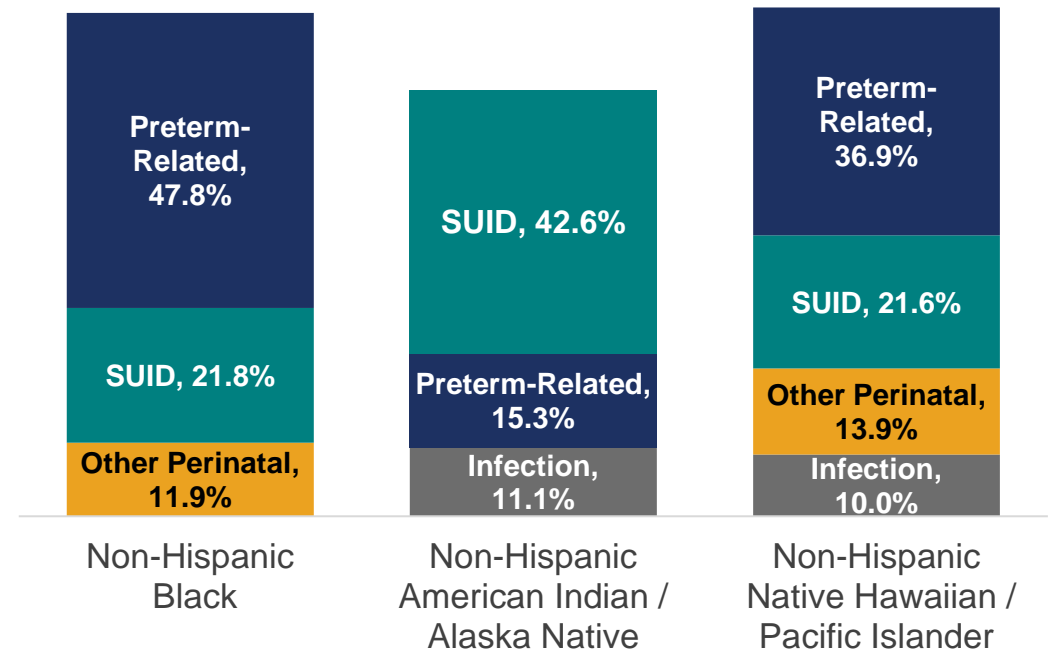
Infant Mortality – United States

Proximate Causes Overall and of Disparities

Overall Summary Cause



Disparity Components (≥10%)
vs. Non-Hispanic White



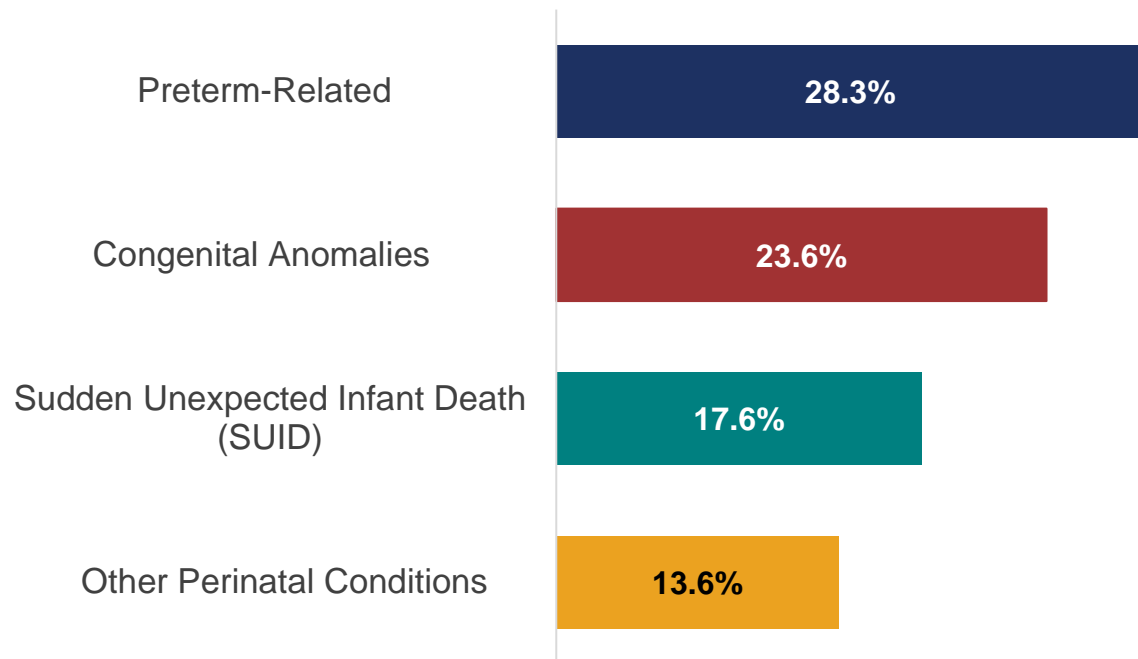
Source: Linked Birth / Infant Death File 2019-2021
 Preterm-related CDC definition of underlying causes where 75% or more of total infant deaths attributed to that cause were deaths of infants born preterm (<37 weeks of gestation) and the cause of death was a direct consequence of preterm birth based on a clinical evaluation and review of the literature
 SUID includes SIDS, unknown cause, and accidental suffocation and strangulation in bed

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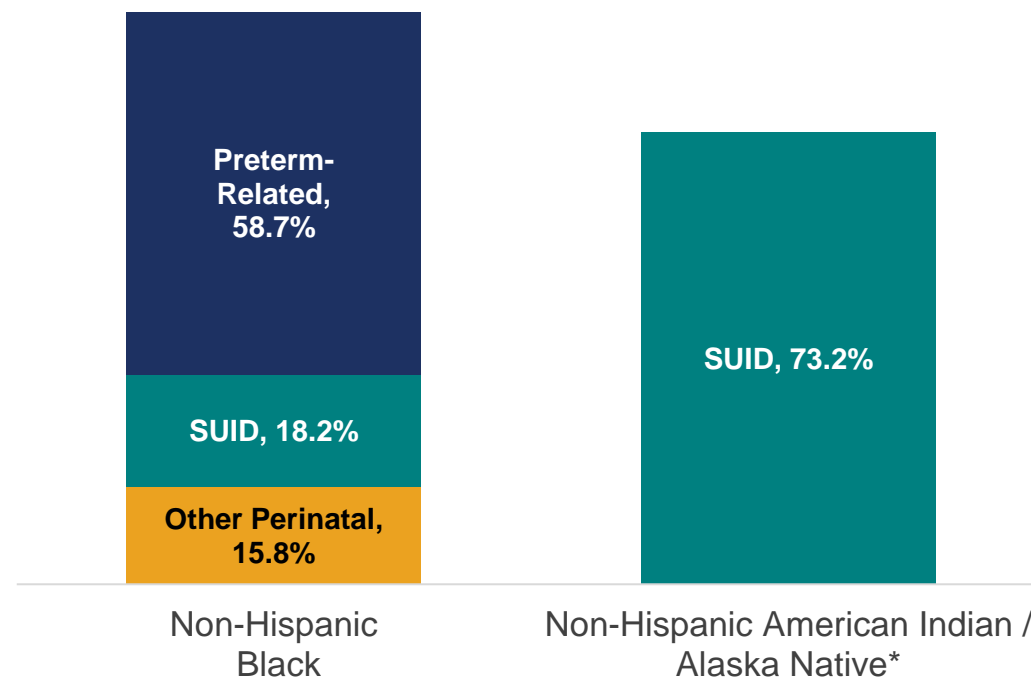


Infant Mortality – Nebraska Proximate Causes Overall and of Disparities

Overall Summary Cause



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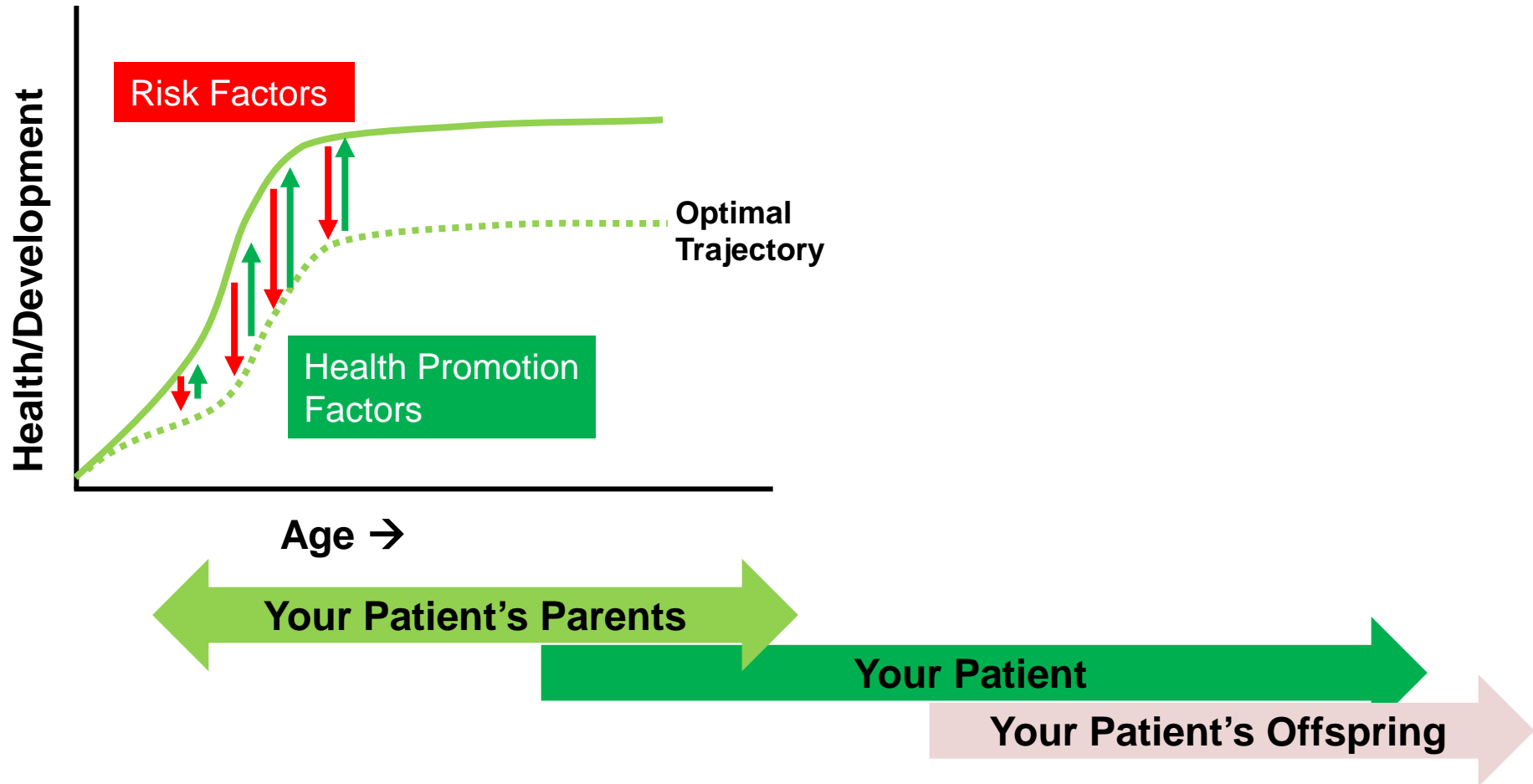
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Life Course Approach



Structural and Social Determinants of Health

STRUCTURAL DETERMINANTS

- GOVERNING PROCESSES
- ECONOMIC AND SOCIAL POLICIES
- RACISM, DISCRIMINATION, BIAS, AND SEGREGATION



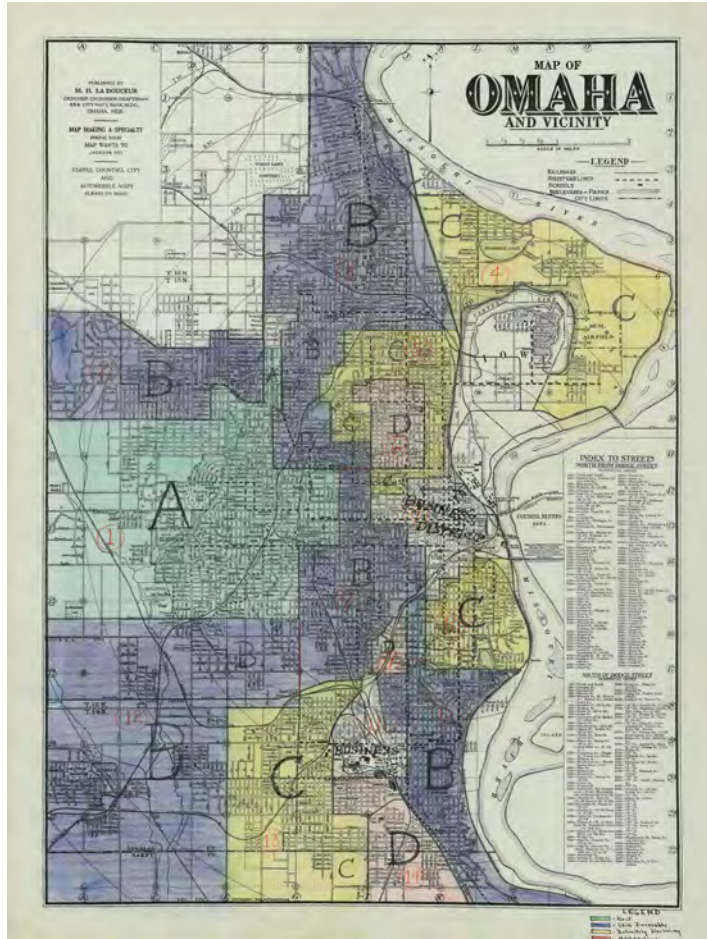
EXPERIENCE OF SOCIAL DETERMINANTS

- INCOME/POVERTY/WEALTH
- EDUCATION
- EMPLOYMENT
- TRANSPORTATION
- HOUSING
- FOOD SECURITY
- EXPOSURE TO TOXINS
- HEALTH INSURANCE
- DISTANCE TO SERVICES

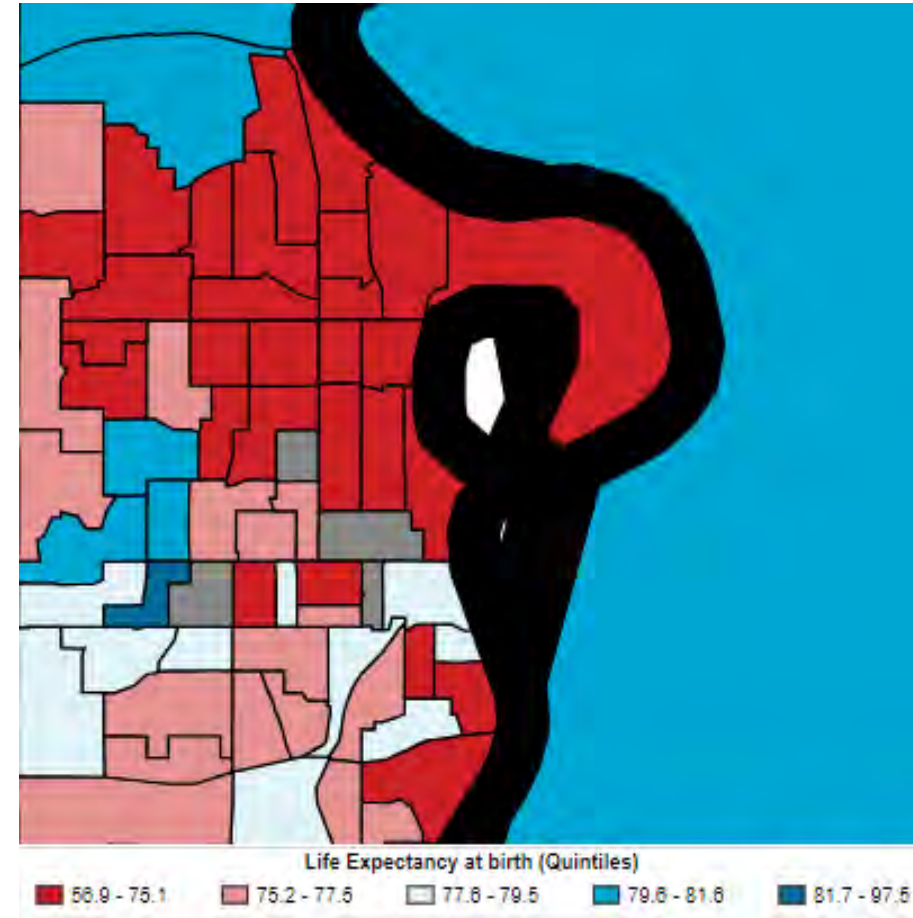
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S/SDOH Example: Redlining and Life Expectancy in Omaha



SOURCE: Nelson, RK, Winling L, et al. (2023). Mapping Inequality: Redlining in New Deal America. Digital Scholarship Lab. <https://dsl.richmond.edu/panorama/redlining>



SOURCE: Tejada-Vera B, Bastian B, et al (2020). Life Expectancy Estimates by U.S. Census Tract, 2010-2015. National Center for Health Statistics. <https://www.cdc.gov/nchs/data-visualization/life-expectancy/>

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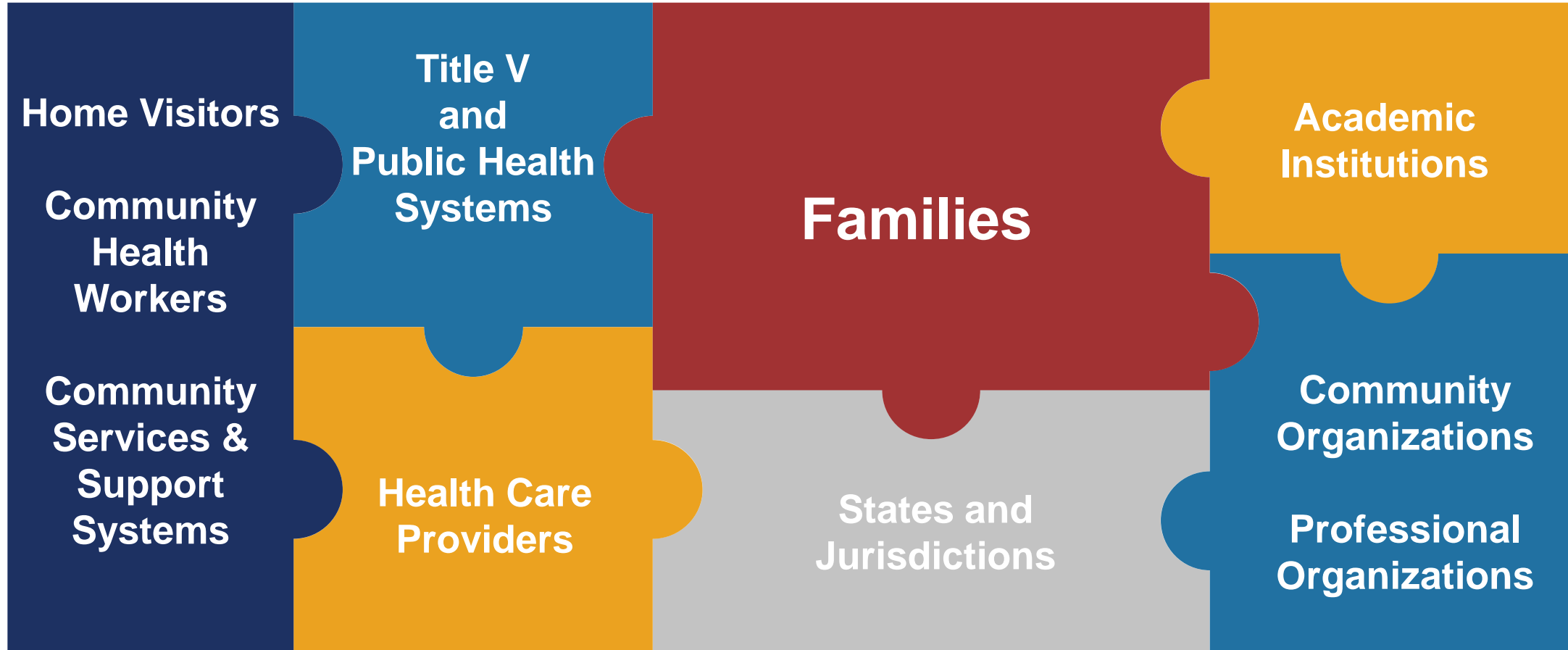
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Working Together



MCHB Maternal and Infant Health Programs



- Healthy Start
- Maternal, Infant, and Early Childhood Home Visiting
- National Maternal Mental Health Hotline
- Title V MCH Block Grant
- Women's Preventive Services Initiative
- Bright Futures

Promotes **access** to health care services



- Alliance for Innovation on Maternal Health (AIM)
- AIM Capacity Program
- Integrated Maternal Health Services
- State Maternal Health Innovation Program
- Newborn Screening

Improves **quality** of care



- Healthy Start: Community-Based Doulas
- Minority Serving Institutions Research Collaborative
- Screening and Treatment for Maternal Mental Health and Substance Use Disorders (MMHSUD)

Strengthens the **workforce**



Maternal and Infant Health Mapping Tool



[? User Guide](#)
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Maternal and Infant Health Mapping Tool

All Layers Health Indicators Infant Health Equity Health Resources Demographic Characteristics Geographic Areas

Health Indicators

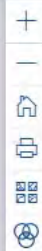
Infant Health Equity

- Black-White Infant Mortality Rate Ratio ?
- Deaths due to Disparity - Black Infants ?
- Infant Mortality Rate-Black Infants (per 1,000) ?
- Infant Mortality Rate-Black-White Difference (per 1,000) ?
- Infant Mortality Rate-White Infants (per 1,000) ?

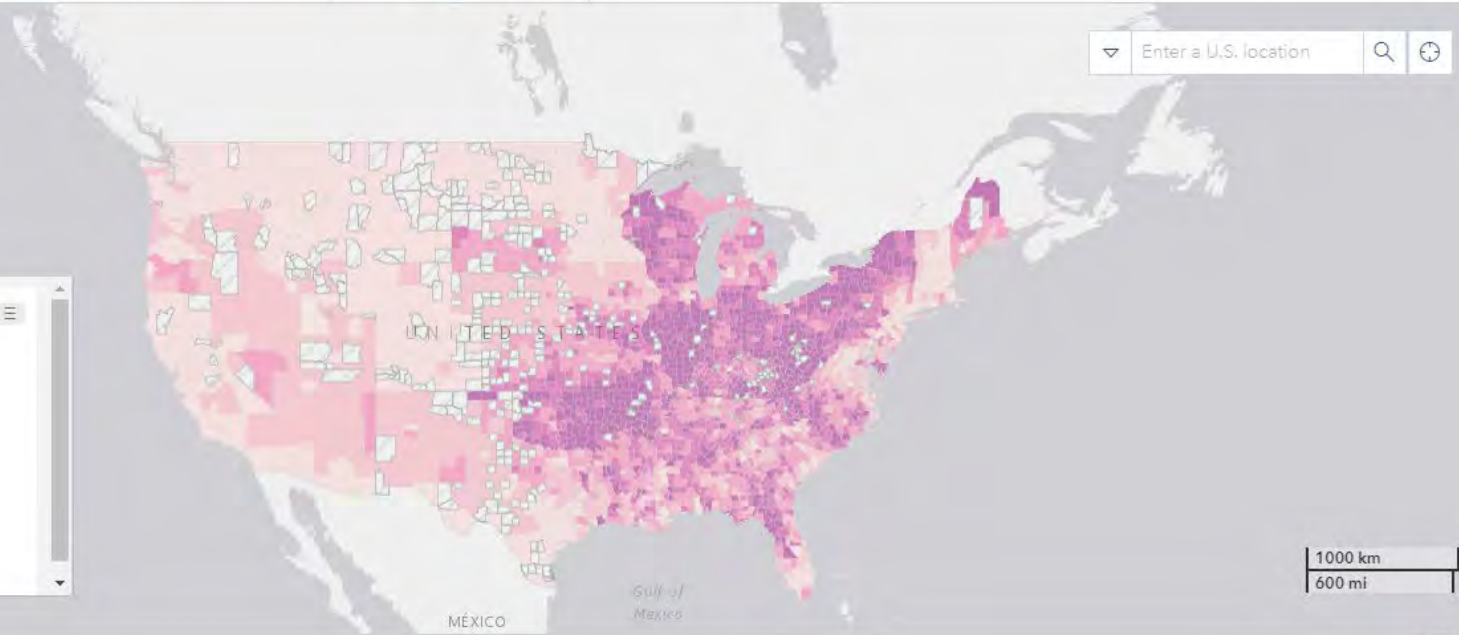
Health Resources

Demographic Characteristics

Geographic Areas



- Infant Mortality Rate-Black Infants (per 1,000)
 - 4.9 - 9.6
 - > 9.6 - 11.0
 - > 11.0 - 12.0
 - > 12.0 - 13.2
 - > 13.2 - 19.1
 - Insufficient Data



Infant Mortality Rate-Black Infants (per 1,000)

1 - 3270 of 3270 records

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