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Multilevel Influences of Cancer Inequities at the Intersection of Rurality and Race/Ethnicity

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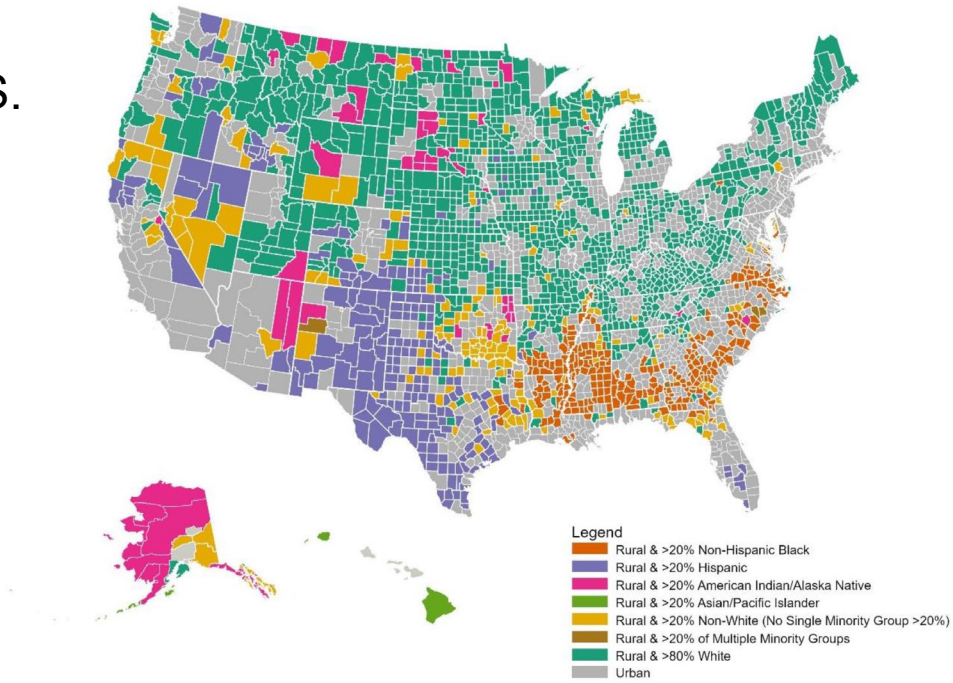
RURAL & MINORITY Health Research Center

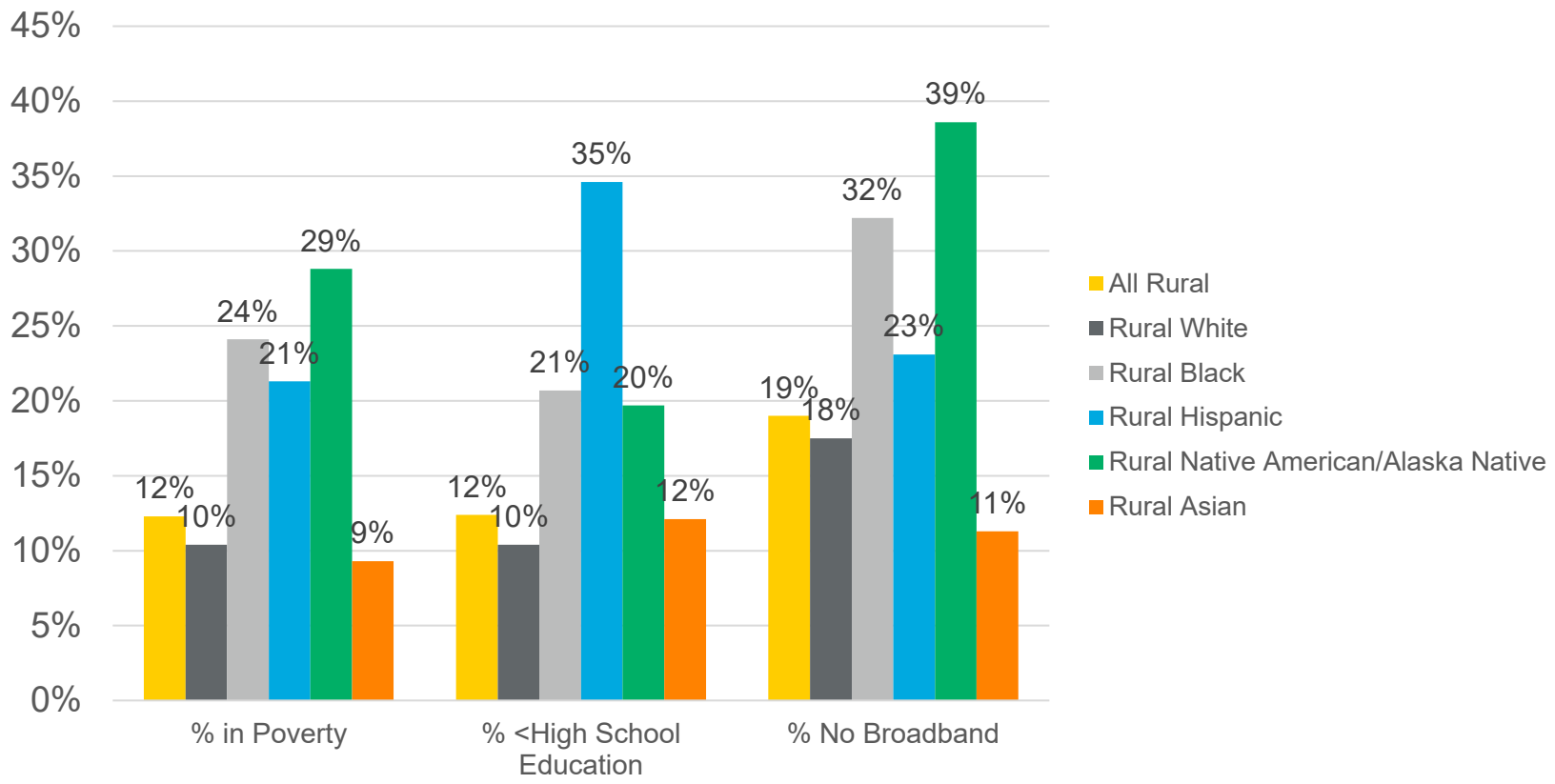
Intersection of Rurality Race/Ethnicity

- By most measures, rural populations comprise between ~15-20% of the U.S. population (59+ million Americans)
- 22% of rural Americans are people of color.
  - One in every 25 Americans in a rural person of color
  - ~13 million Americans
- Both rurality AND race/ethnic are social constructs



Source: Zahnd et al, *IJERPH*, 2021.

Social and Physical Determinants of Health



Source: Probst et al, 2019; RMHRC Policy Briefs

Health Concerns in Rural America

TABLE 10. Rural Americans' Views of the Most Urgent Health Problem Currently Facing Their Communities, by Race/Ethnicity

Q32. What is the most urgent health problem currently facing your local community? [Open-Ended]

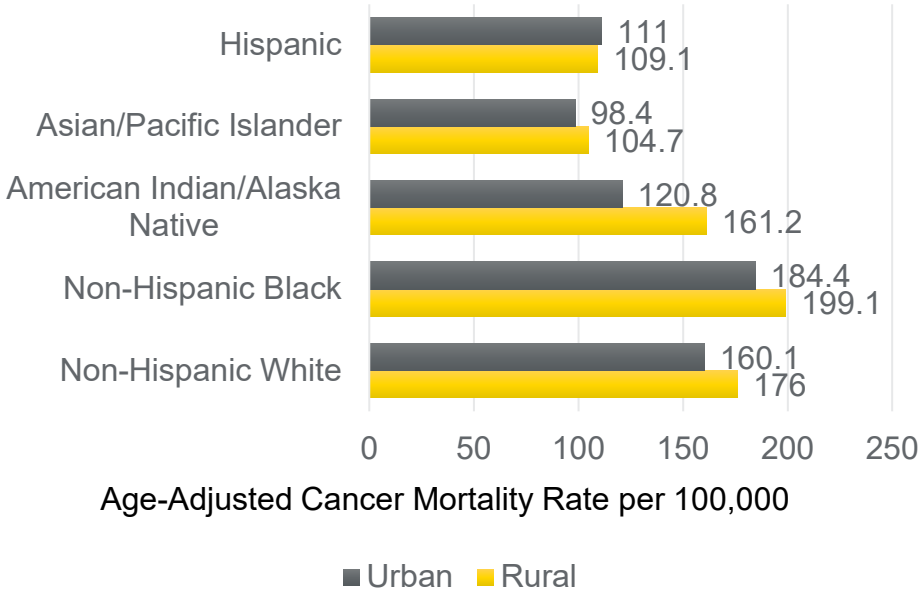
Whites		African Americans		Latinos	
1. Drug addiction/abuse*	27	1. Cancer	19	1. Cancer	13
2. Cancer	12	2. Health care access	15	2. (tied) Drug addiction/abuse*	10
3. Health care access	10	3. Diabetes	9	2. (tied) Health care access	10

*Drug addiction or abuse includes opioid addiction/abuse. NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, Life in Rural America, 6/6/18 – 8/4/18. Q32. No other issues were mentioned by more than 10% of rural Americans. N= 1300 rural adults ages 18+ (full sample).

IMPORTANT CAVEAT: Survey was conducted **prior to** the COVID-19 pandemic.

Source: RWJF/Harvard Poll

Rural and Racial/Ethnic Cancer Disparities

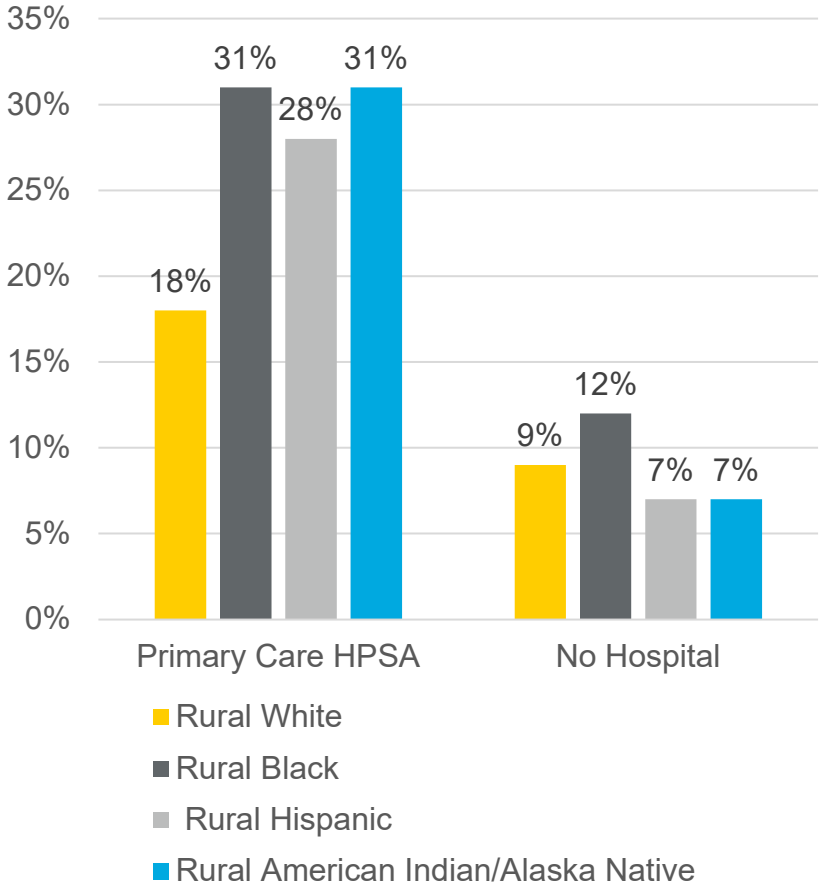


	Breast Cancer Screening (Aged 50-74)	Cervical Cancer Screening (Aged 21-65)	Colorectal Cancer Screening (Aged 50-75)
Rural, %	**75.5**	**76.5**	**65.9**
Urban, %	79.5	80.4	71.9
Rural Racial/Ethnic Groups			
Non-Hispanic White, %	75.3	76.4	66.9
Non-Hispanic Black, %	80.2	85.3	64.2
Hispanic, %	**70.1**	**71.0**	**52.3**

Source: Zahnd et al, *IJERPH*, 2021.; Benavidez et al, *PCD*, 2021

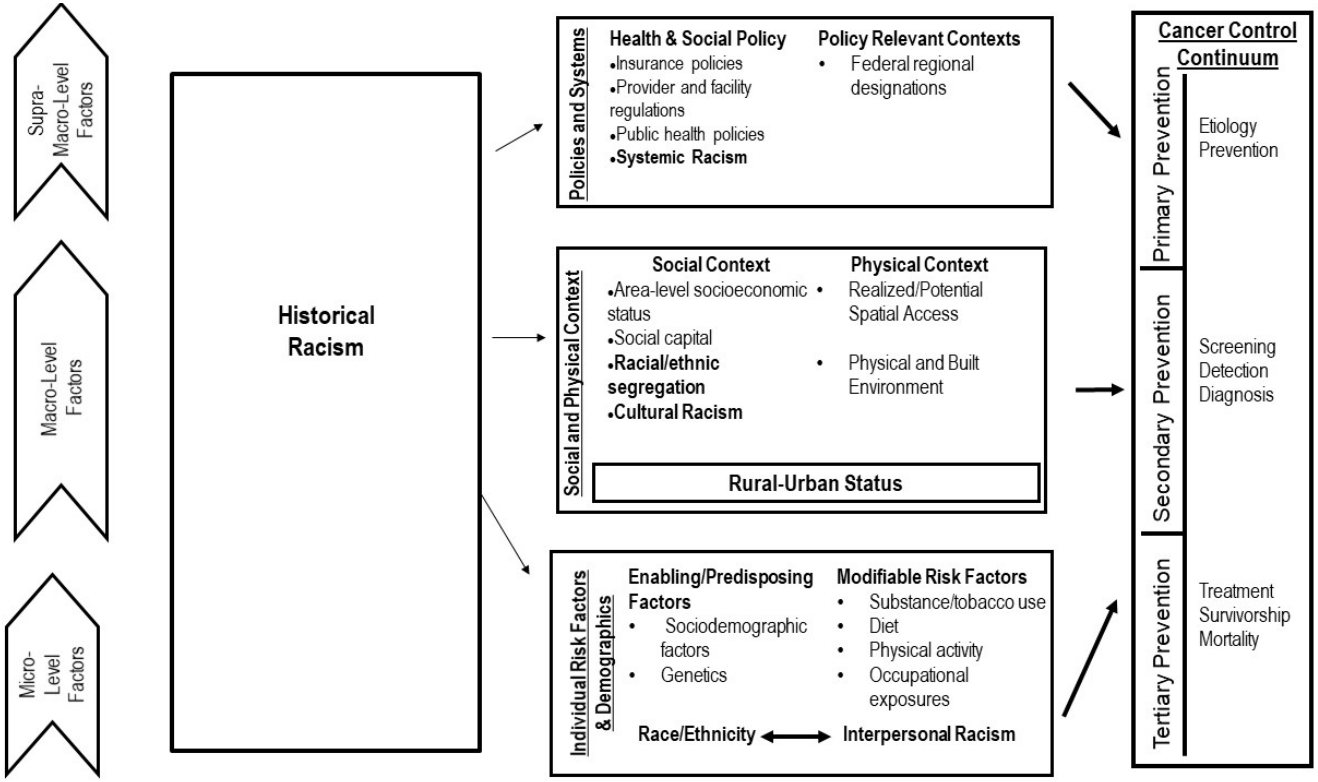
Access to Care

- Access to Cancer Specialists (American Indian/Alaska Native vs. white):
  - 4.94% more likely to live 60+miles from a medical oncologist
  - 3.46% more likely to live 60+ miles from a radiation oncologist
  - 14.35% more likely to live 60+miles from a surgical oncologist



Source: Probst et al, 2019; RMHRC Policy Briefs Hung et al, *Cancer*, 2020.

Multilevel Framework



COMPONENTS:

- Warnecke's Model for Population Health and Health Disparities
- Aday and Andersen Framework for the Study of Healthcare Utilization
- Khan's Typology of Access
- Krieger's Domains of Social Inequity
- Gomez's and Colditz's Reviews of Social and Built Environments
- Taplin's Multilevel Influences on the Cancer Care Continuum
- NCI's Cancer Control Continuum
- Wingo's Framework for Cancer Surveillance
- **Gee and Ford: Structural Racism and Health Inequities**
- **Williams, Lawrence, and Davis-Racism and Health**

Source: Zahnd et al, *Prev Med.* 2019. Zahnd et al, *IJERPH*. 2021.

Implications

- Rural minoritized populations experience notable inequities in social and physical determinants, including access to healthcare services
- Rural Black and American Indian/Alaska Native populations have higher cancer mortality rates than their urban counterparts
- Rural Hispanic populations have lower cancer screening rates
- Considering the multilevel (policy and area-level) factors and historical context are key to eliminating inequities in cancer

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Thank you!


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