

American Indian Social Determinants of Health

**Native American Nutrition Conference
Shakopee Mdewakanton Sioux Community
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Traditional View of Public Health



Pine Ridge Reservation Kyle, S.D.









AI Health Disparities

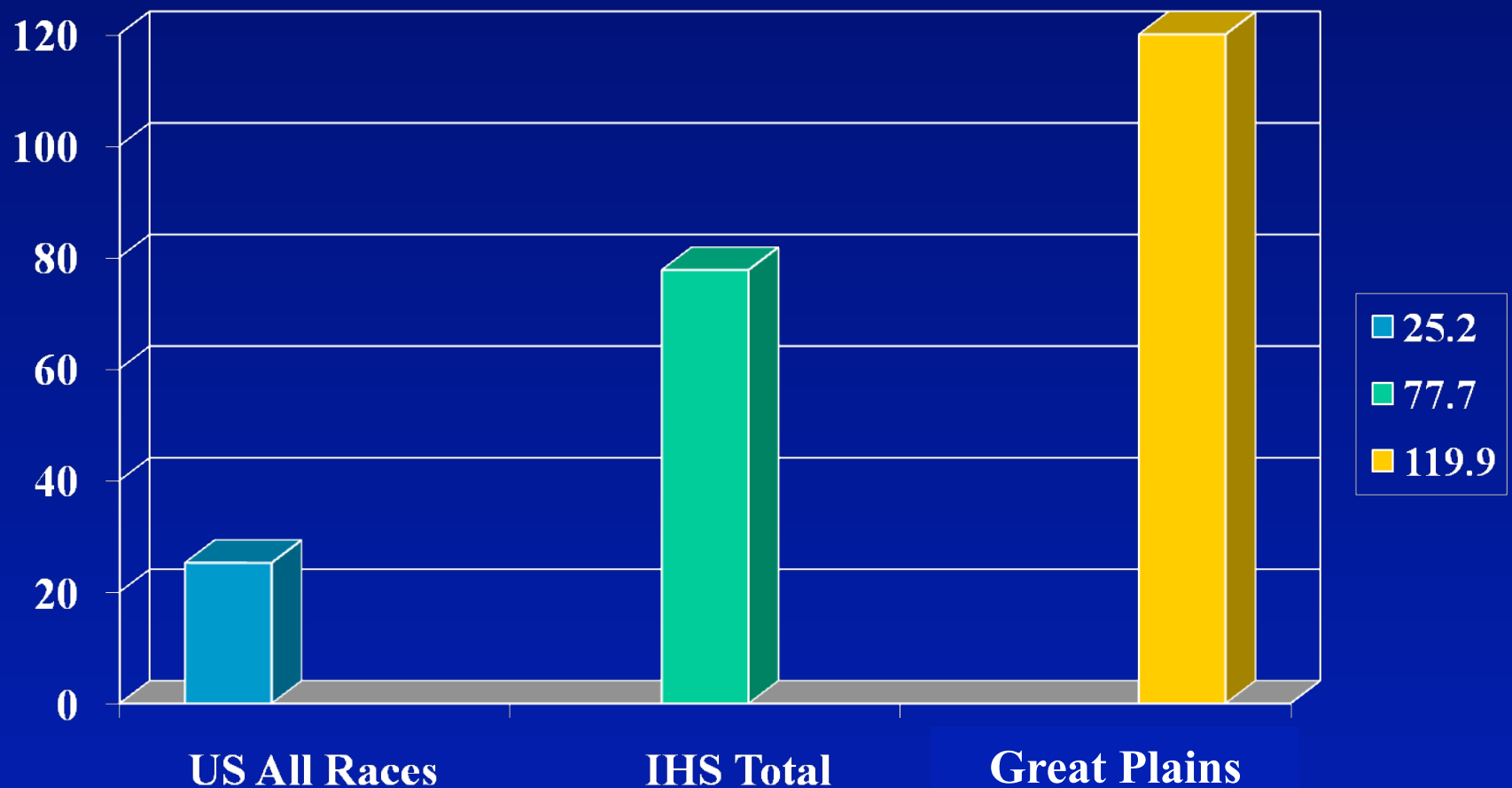
Average age at death in ND (2010 – 2014):

77.4 Years in the White Population

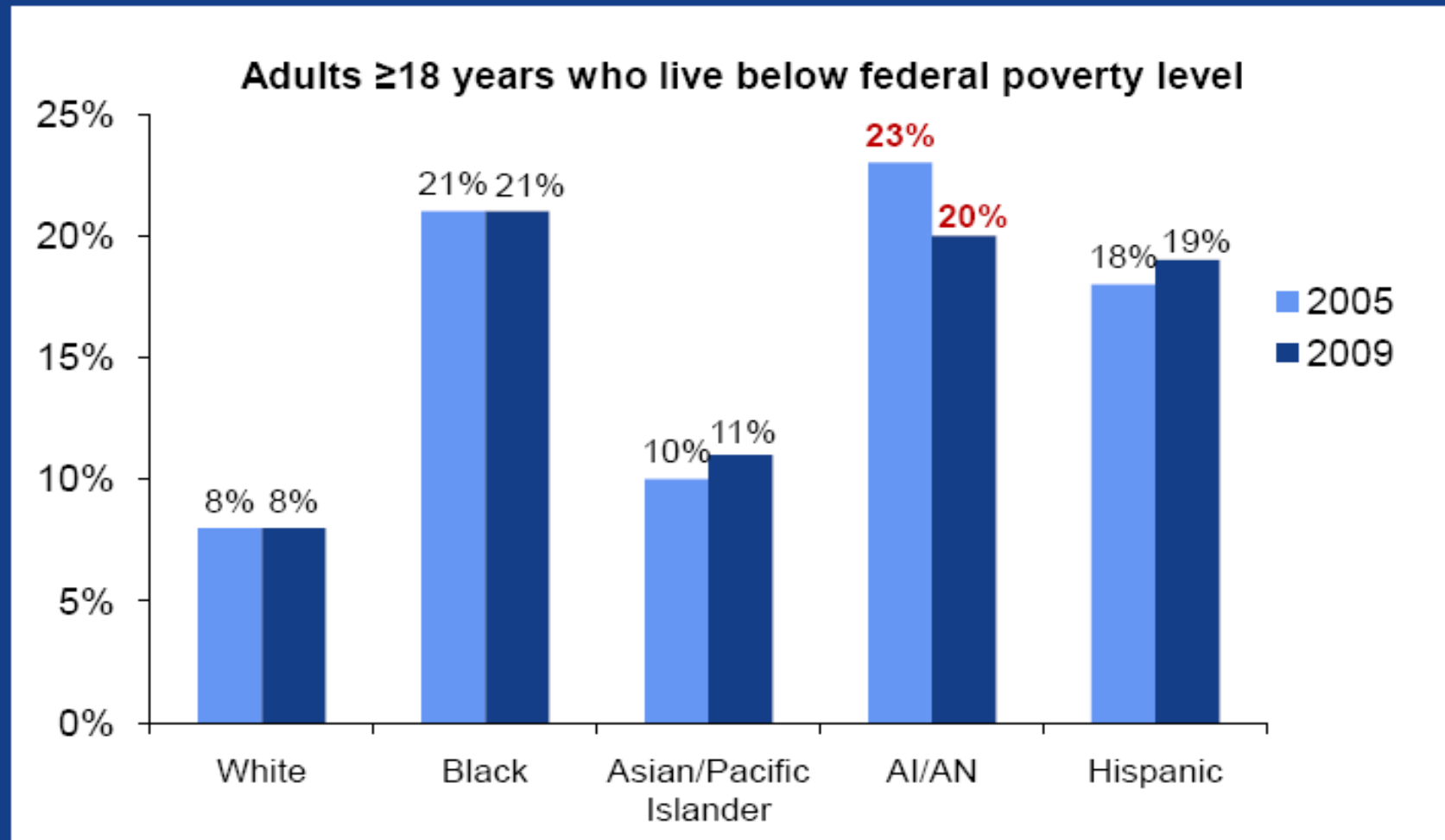
56.6 Years in the AI Population

Diabetes Death Rates

(Rate/Per 100,000 Population)

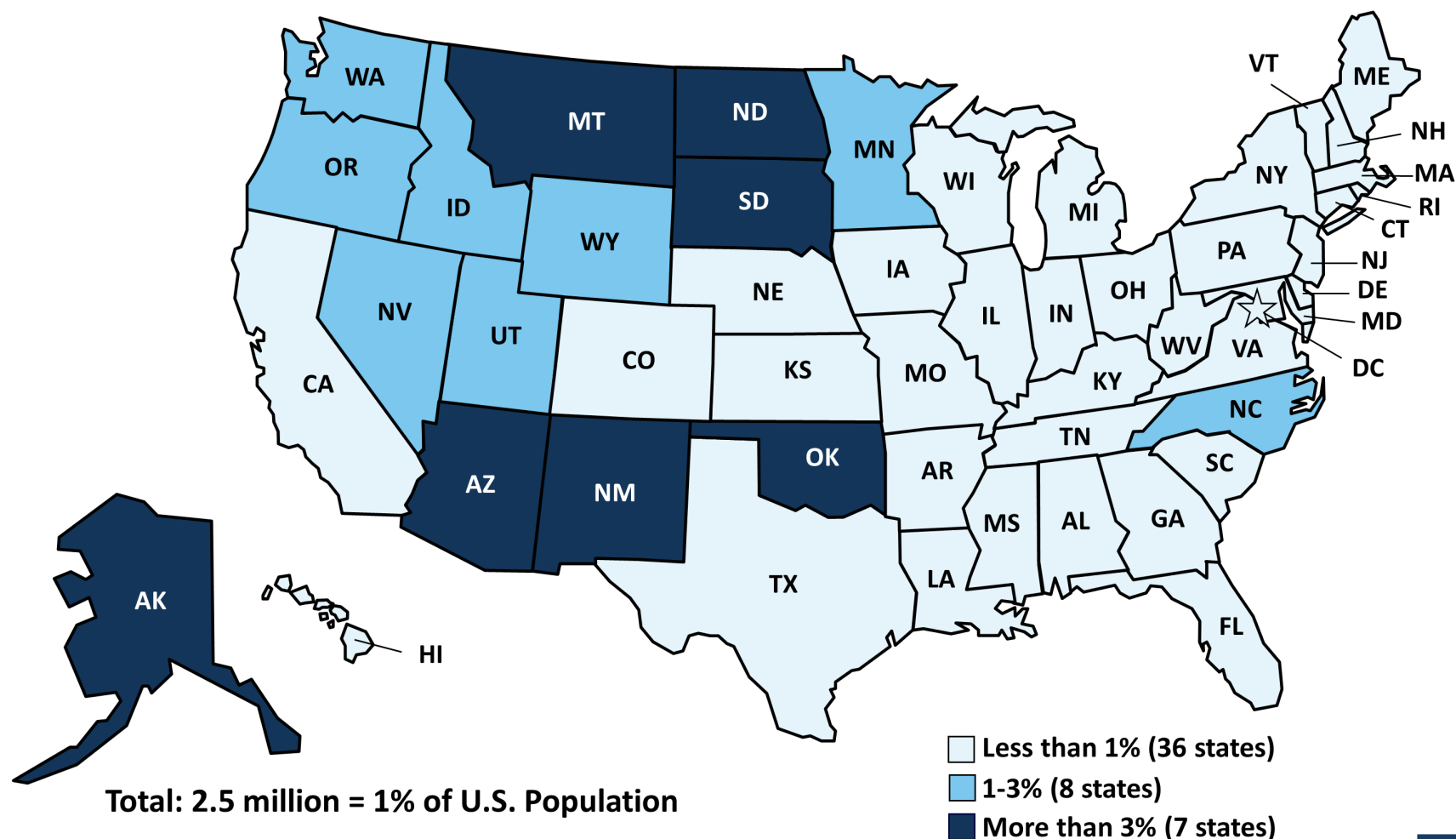


2.5 times as many AI/ANs as whites live below poverty level



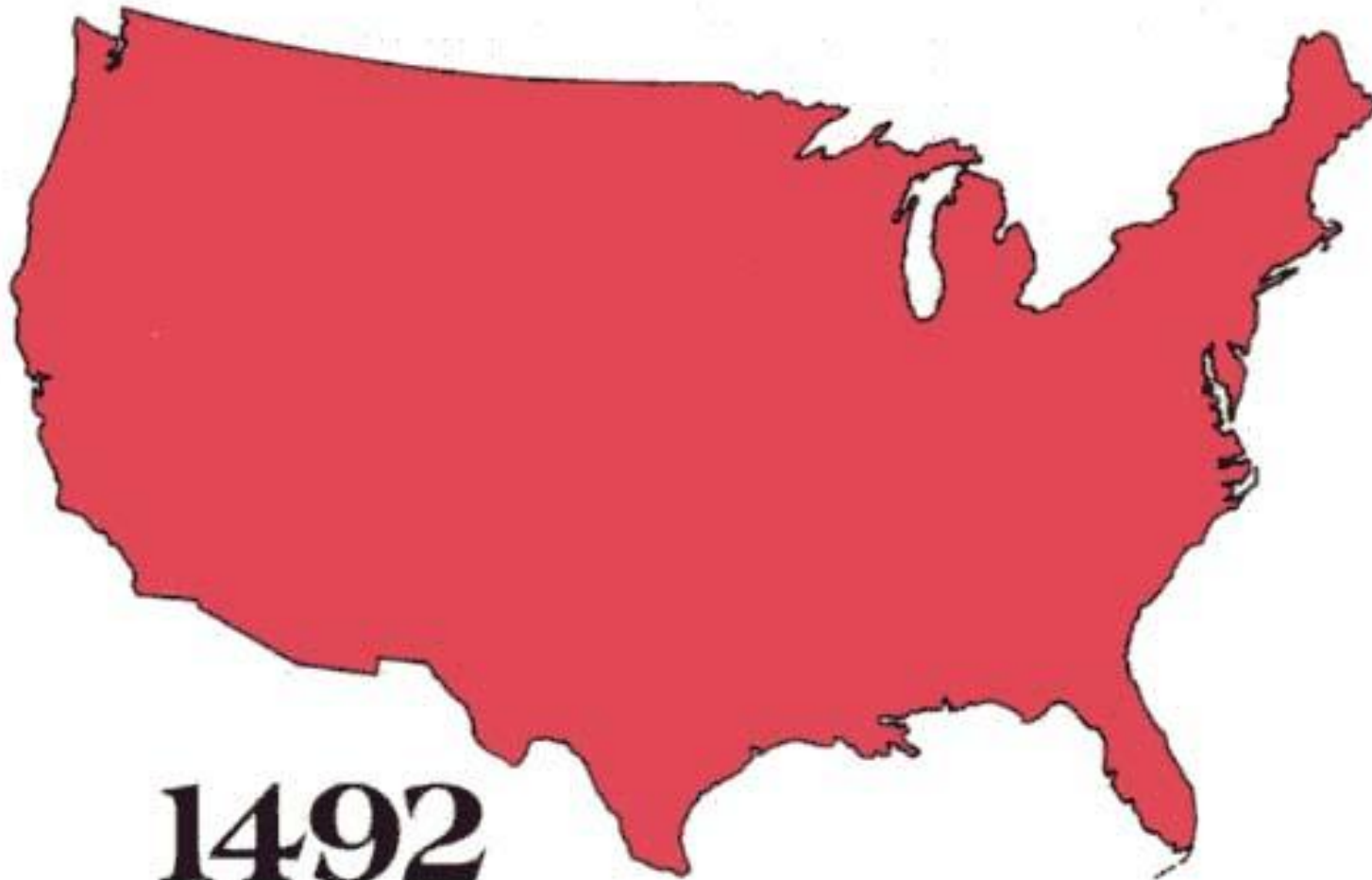
Source: CDC Health Disparities and Inequalities Report 2011, MMWR, Vo. 60

American Indians and Alaska Natives as a Share of the Total Population, by State, 2009-2011

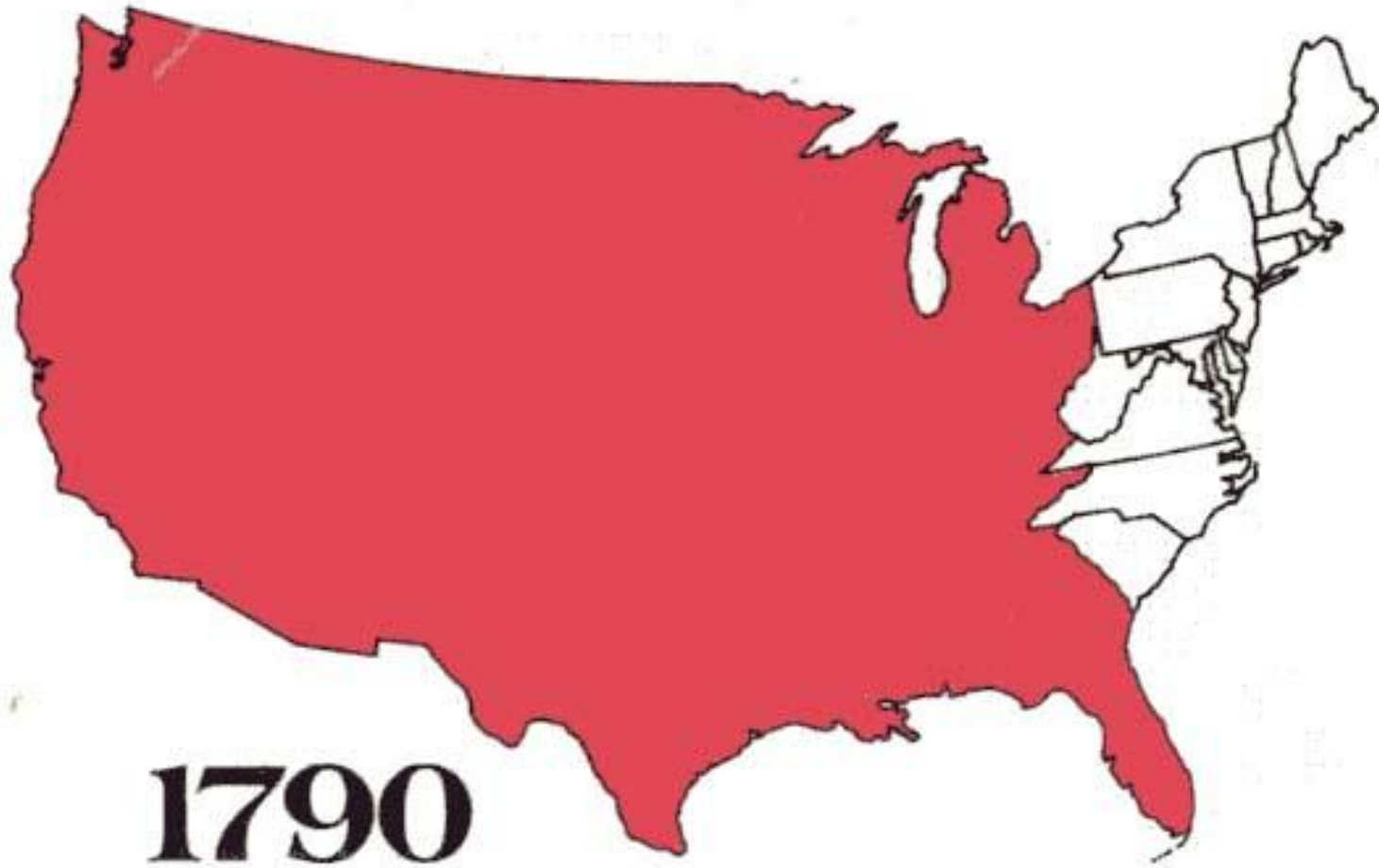


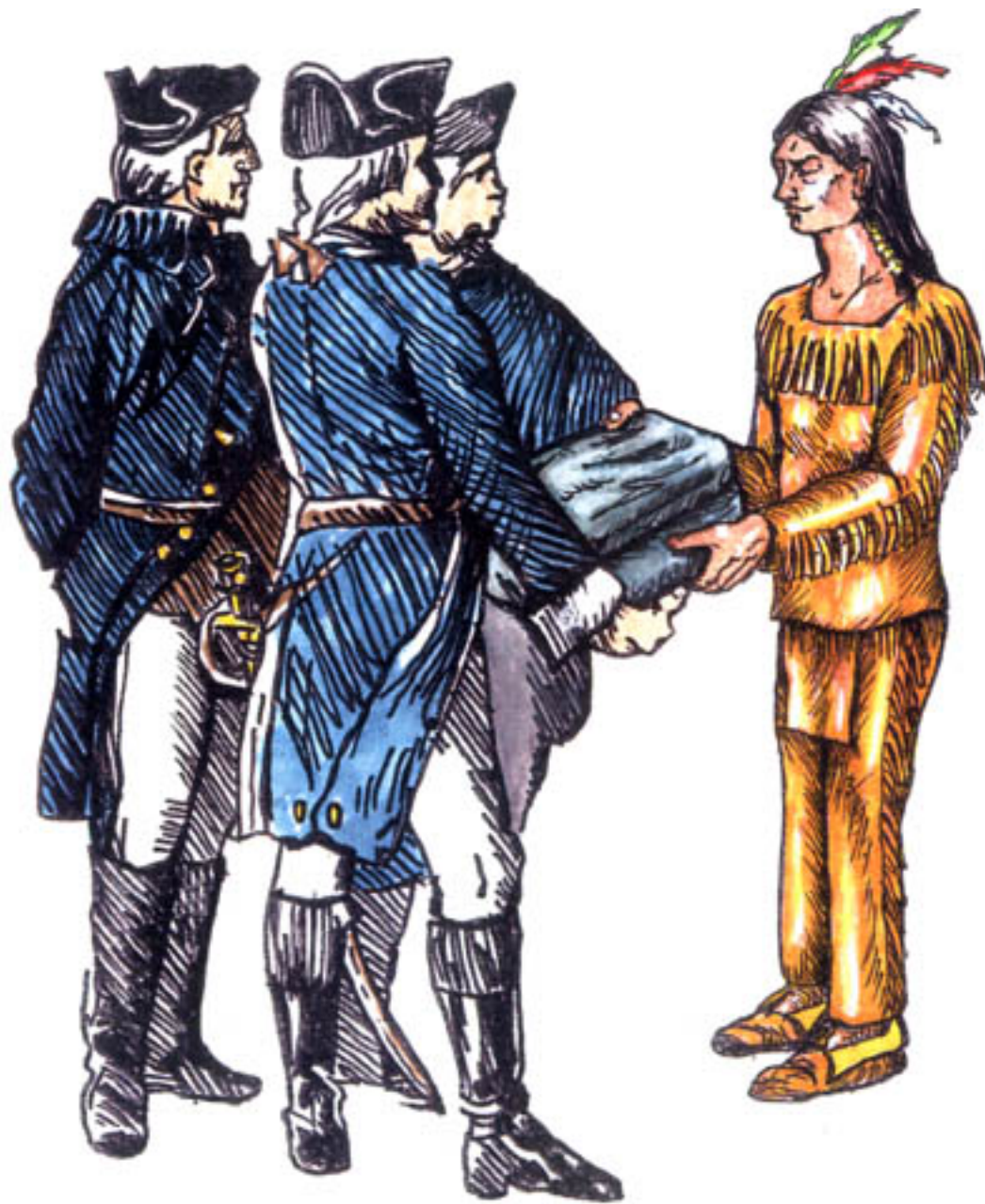
American Indian and Alaska Native includes people of Hispanic origin.
SOURCE: KCMU analysis of 2009 - 2011 ACS.

Historical Context



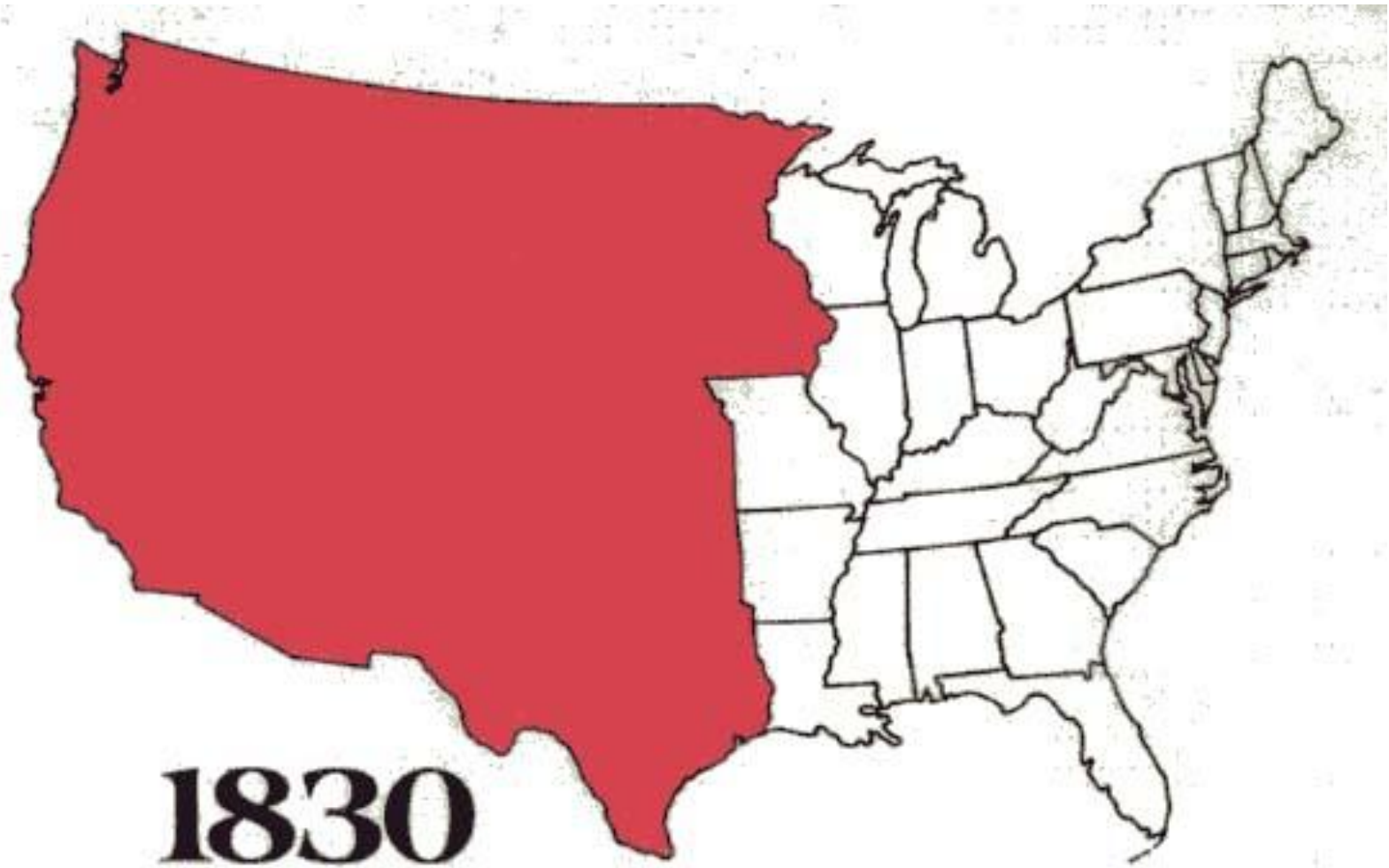
Historical Context





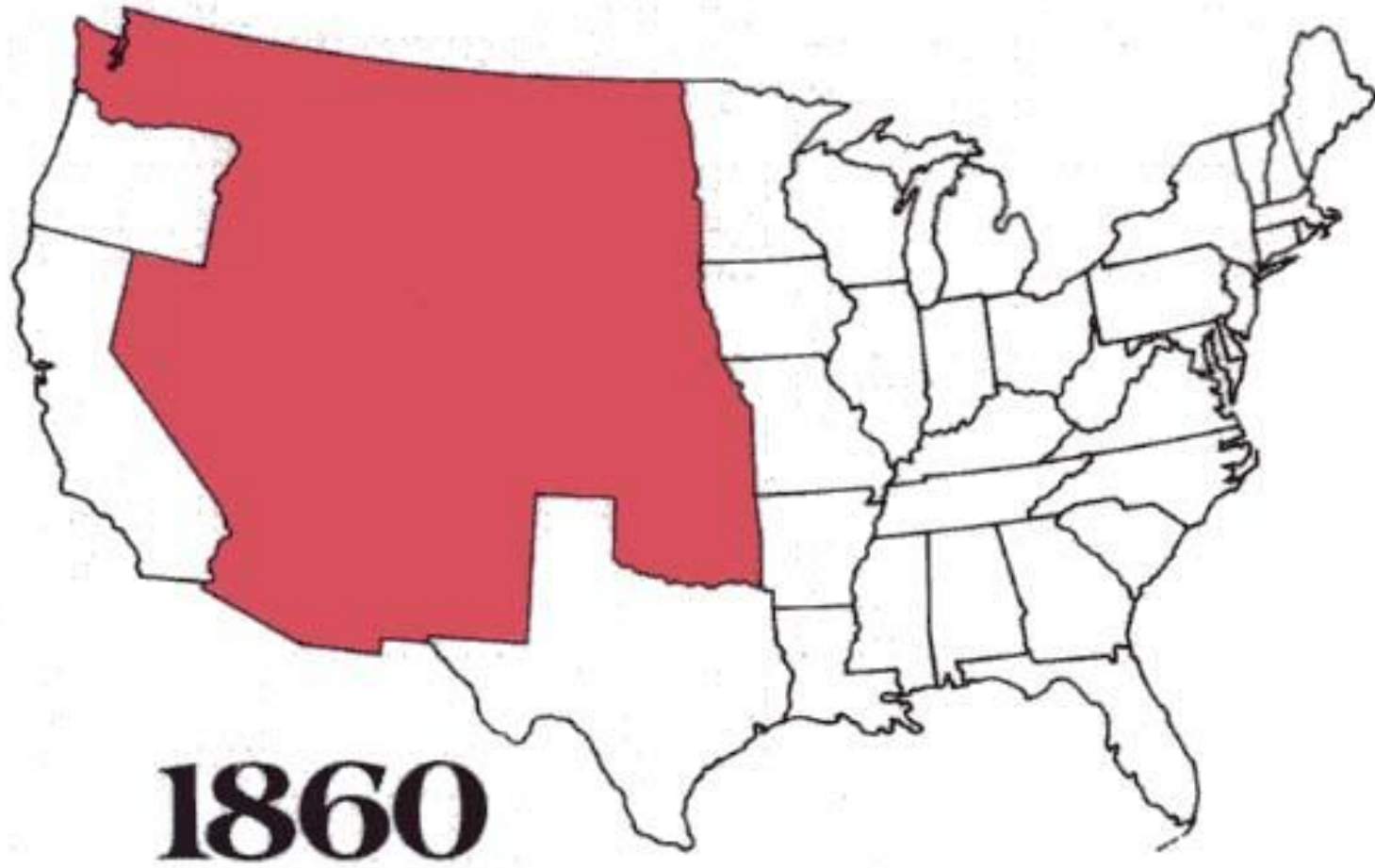
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Historical Context

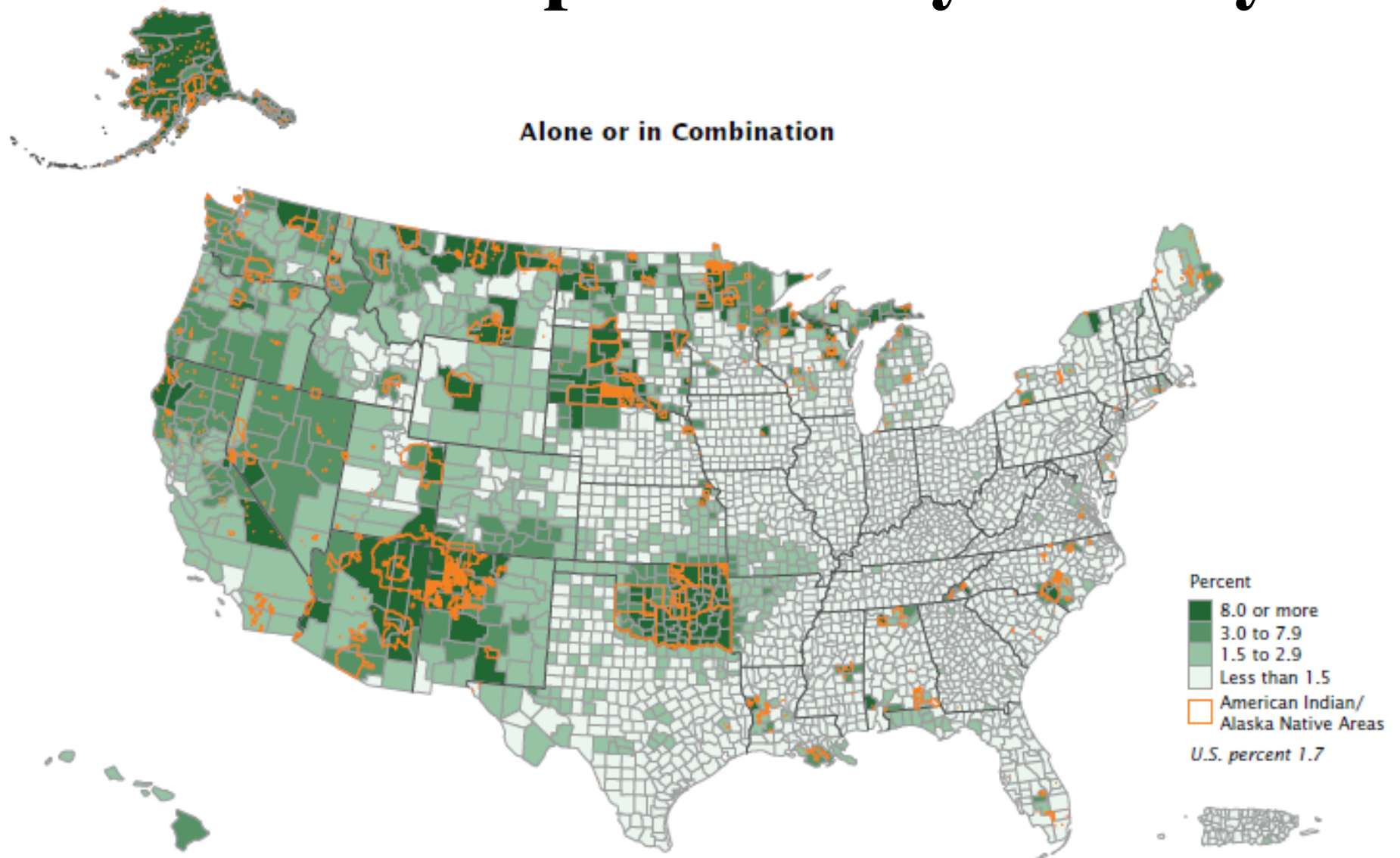




Historical Context

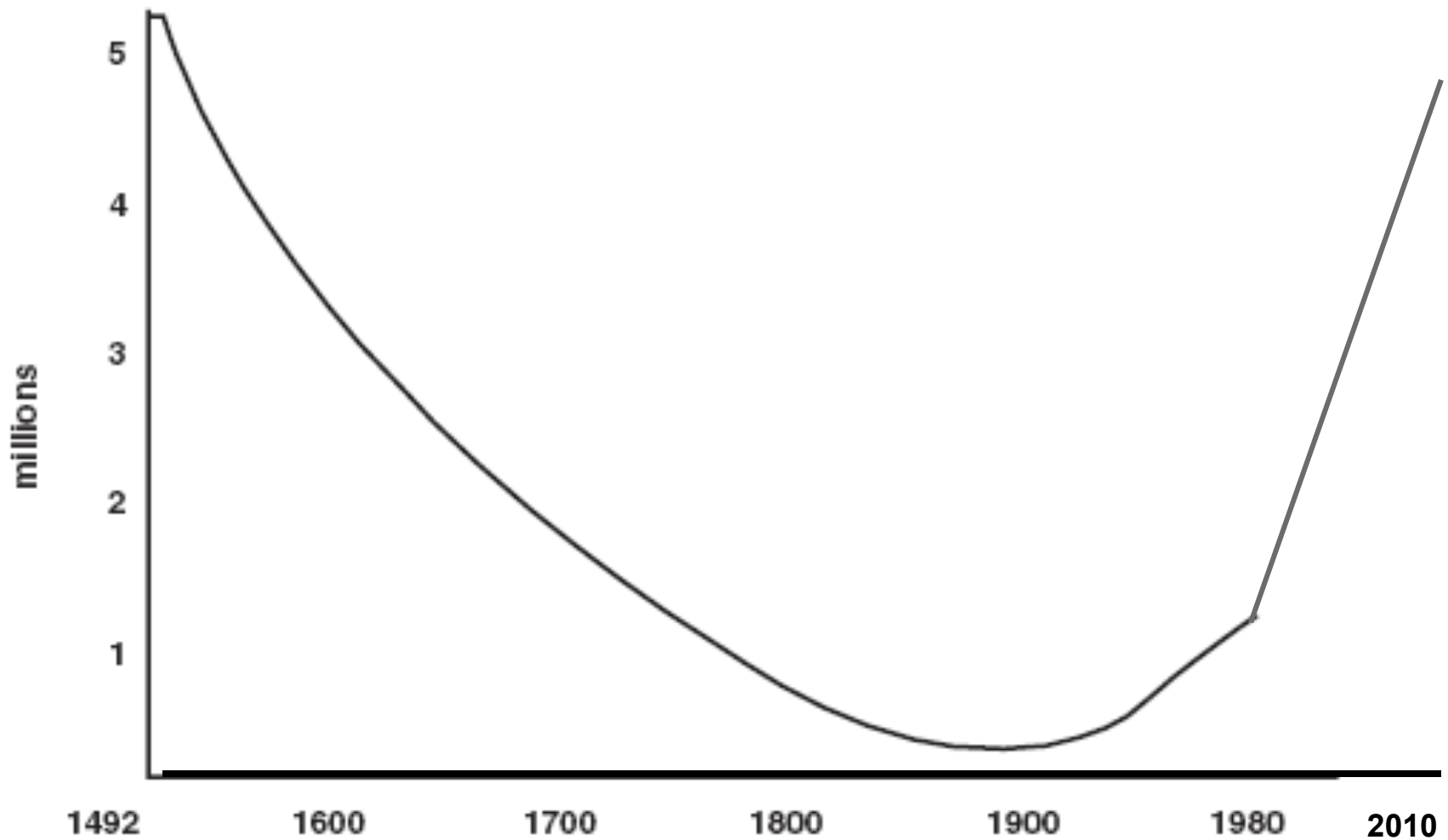


AI/AN Population by County

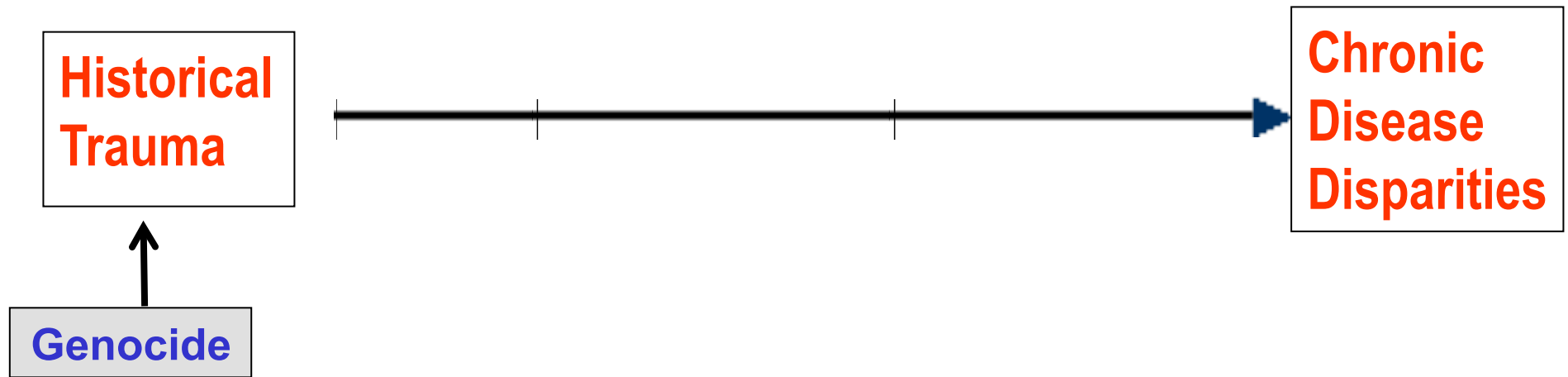


Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1.

AI/AN Population Decline and Recovery, 1492 – 2010

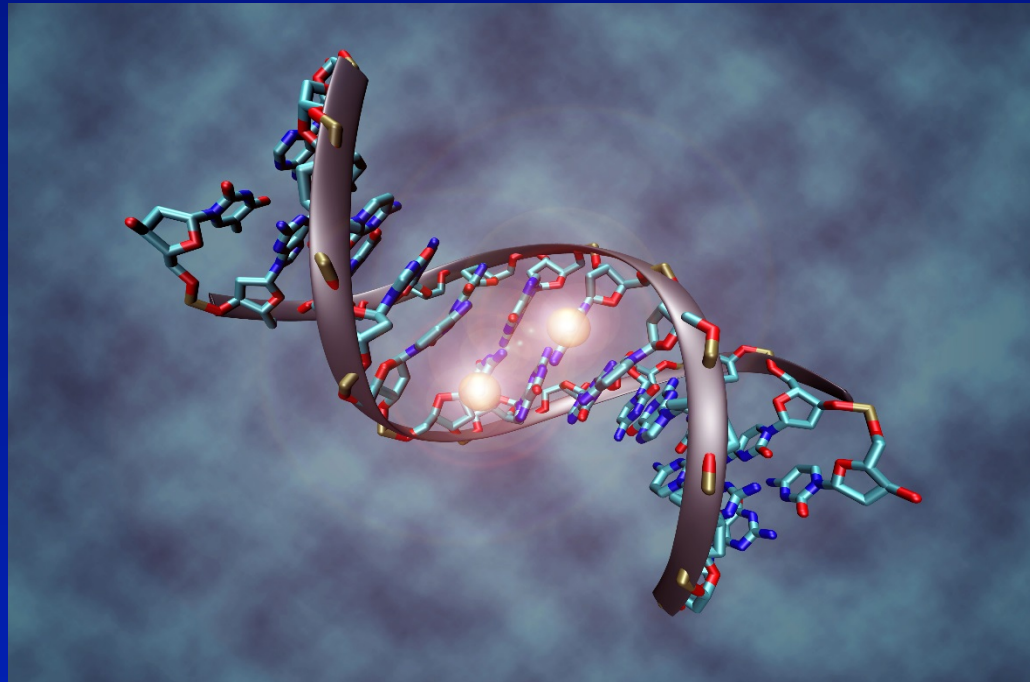


Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives

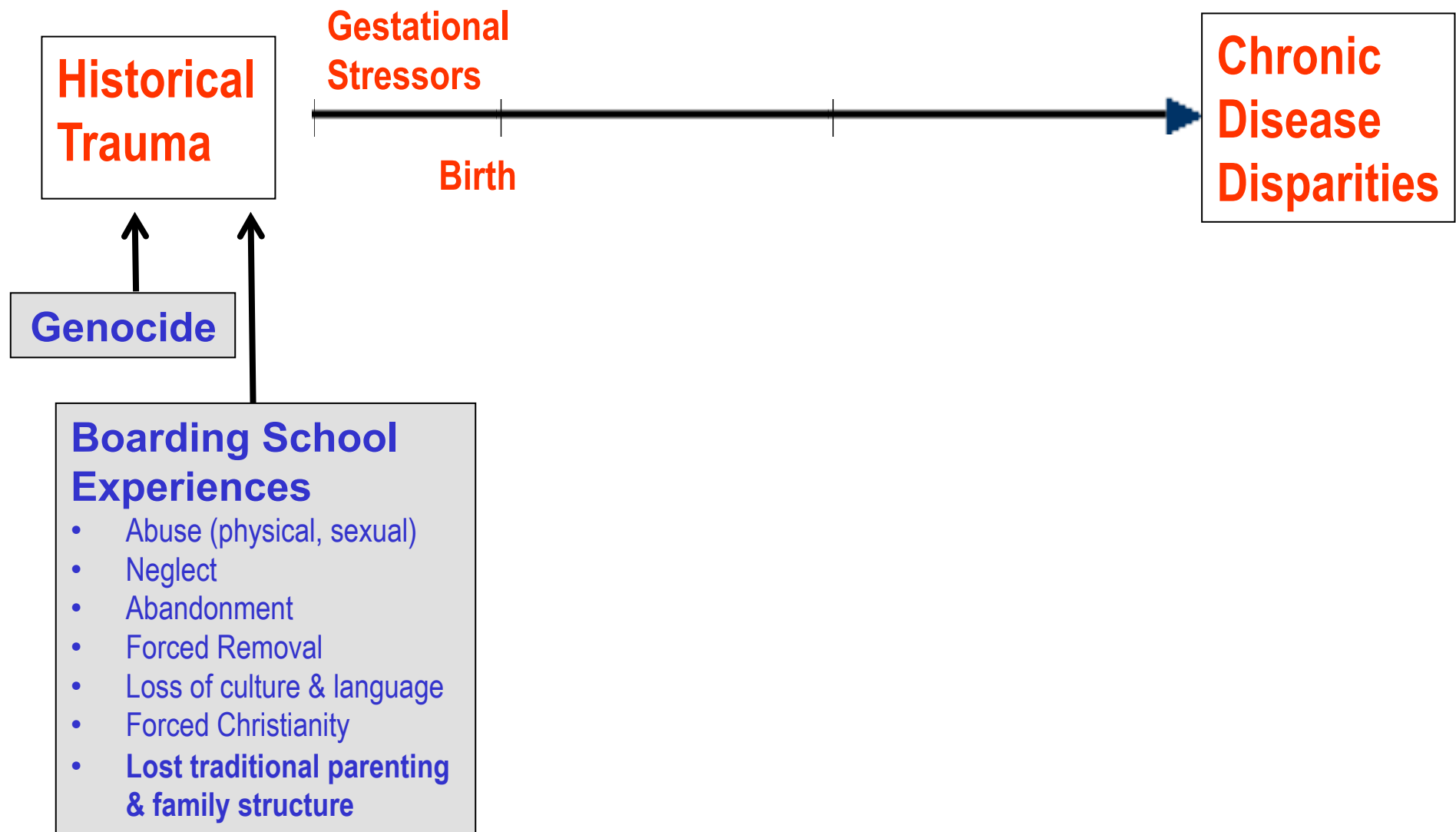


Epigenetics

- Epigenetics refers to the study of changes in the regulation of gene activity and expression that are not dependent on DNA sequence.



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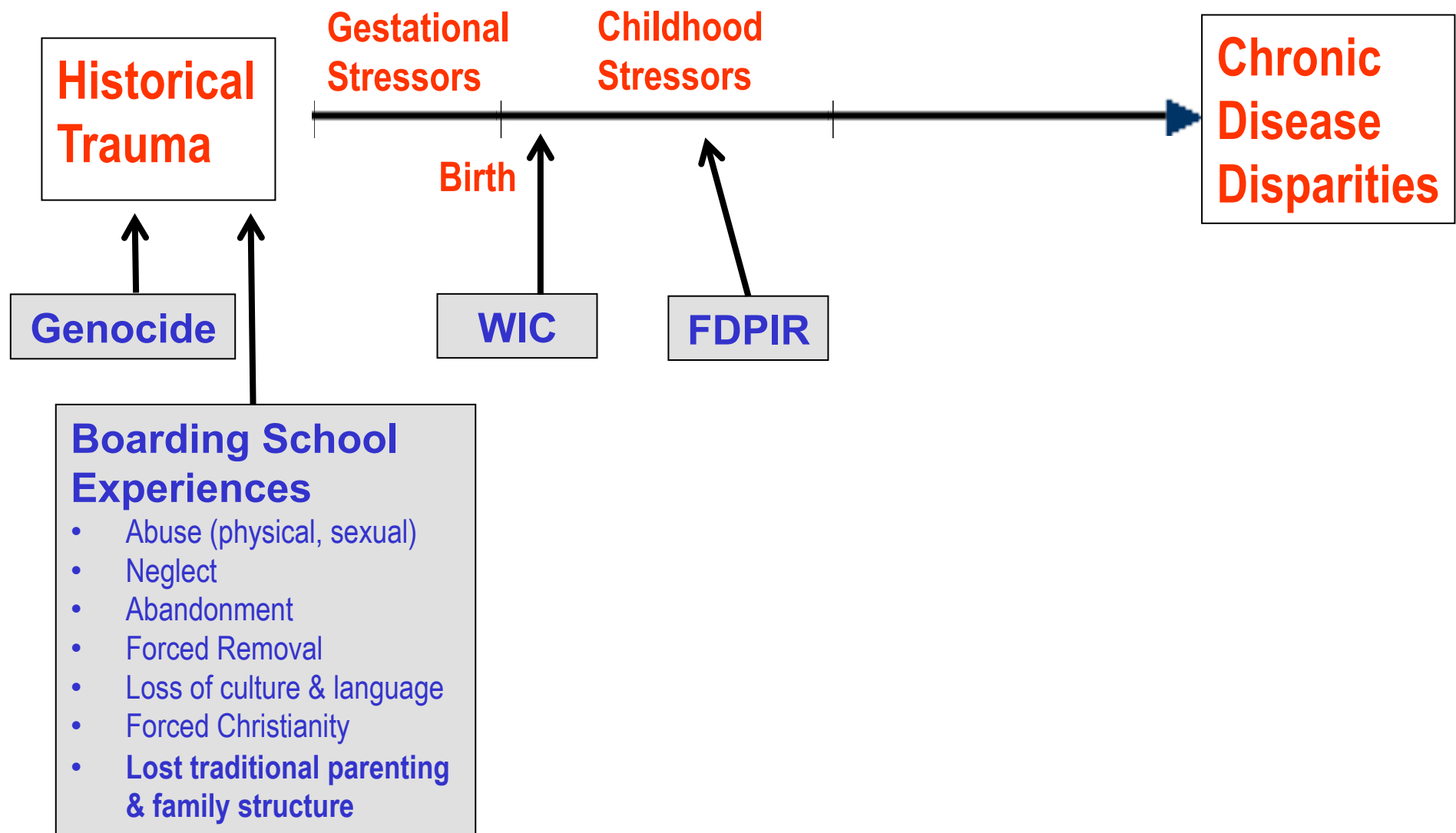


Historical trauma is the collective emotional wounding across generations that results from massive cataclysmic events – Historically Traumatic Events (HTE)*



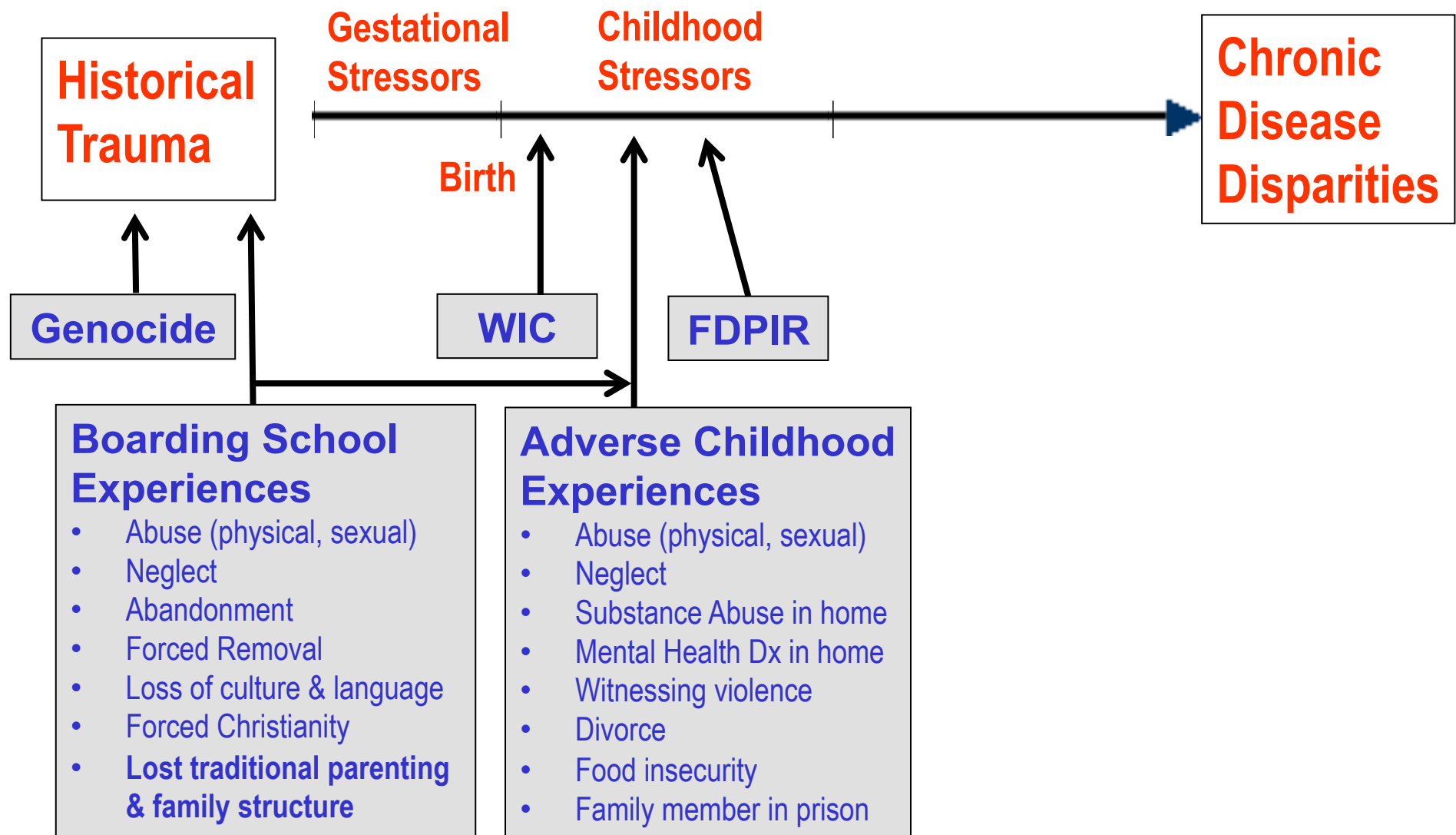
- The trauma is held personally and transmitted over generations. Thus, even family members who have not directly experienced the trauma can feel the effects of the event generations later

Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives





Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives



ACE Study Pyramid



Impact of ACEs on Health

ACES can have lasting effects on....



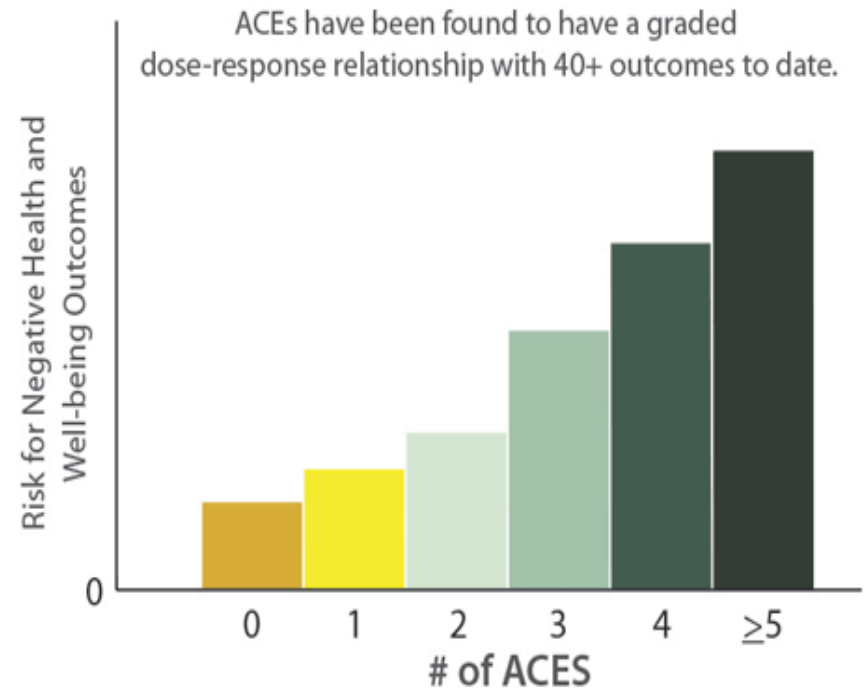
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)

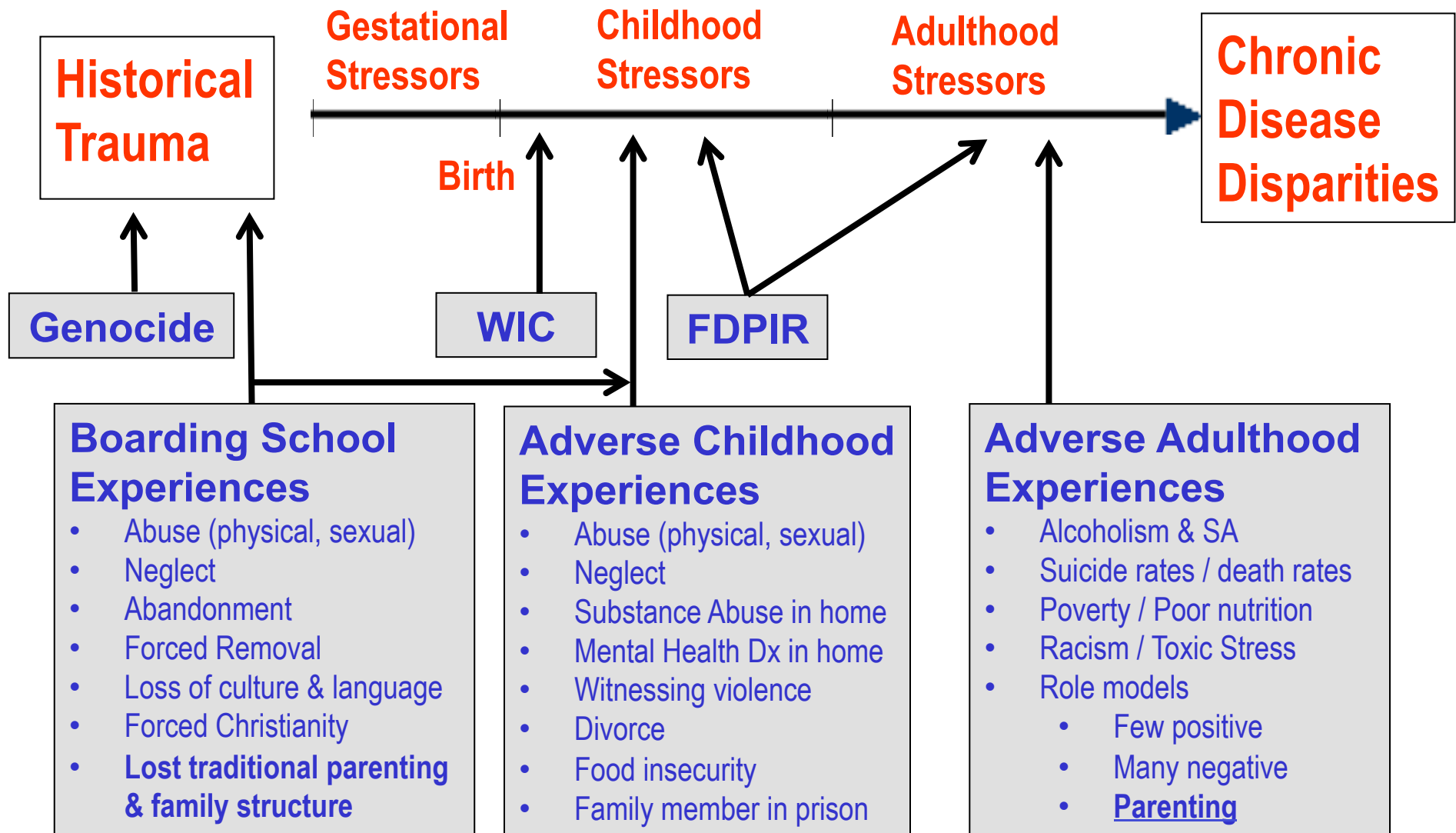


Life Potential (graduation rates, academic achievement, lost time from work)

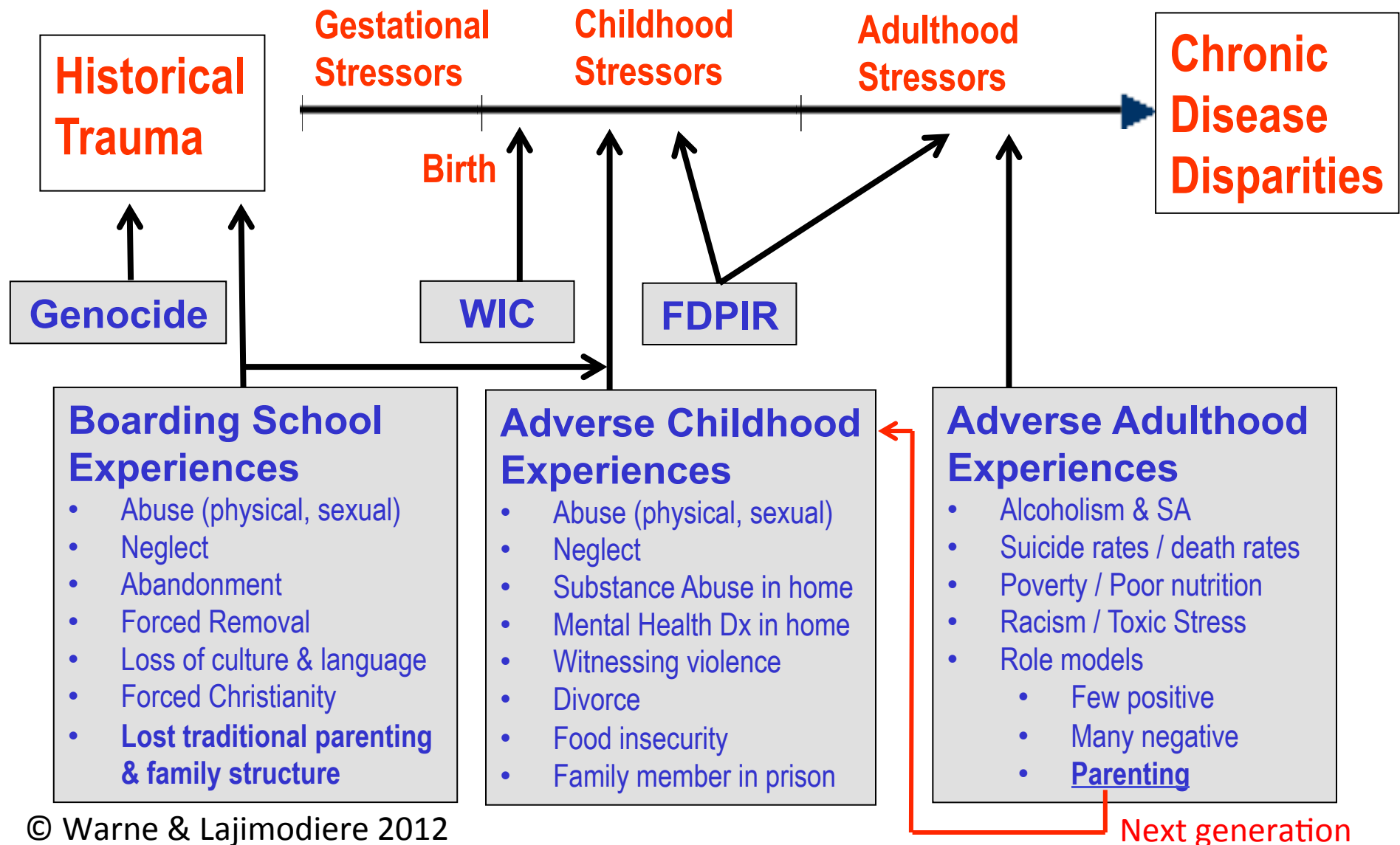


*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.

Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives



Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives



Significant Challenges

Social Determinants

- Poverty
- Trauma
- Politics
- Inattention/Neglect
- Racism
- Inequity

Outcomes

- Health Disparities
- Education Inequality
- Generational Poverty
- Ongoing Racism
- Worsening Inequity
- Suffering and Death

Significant Challenges

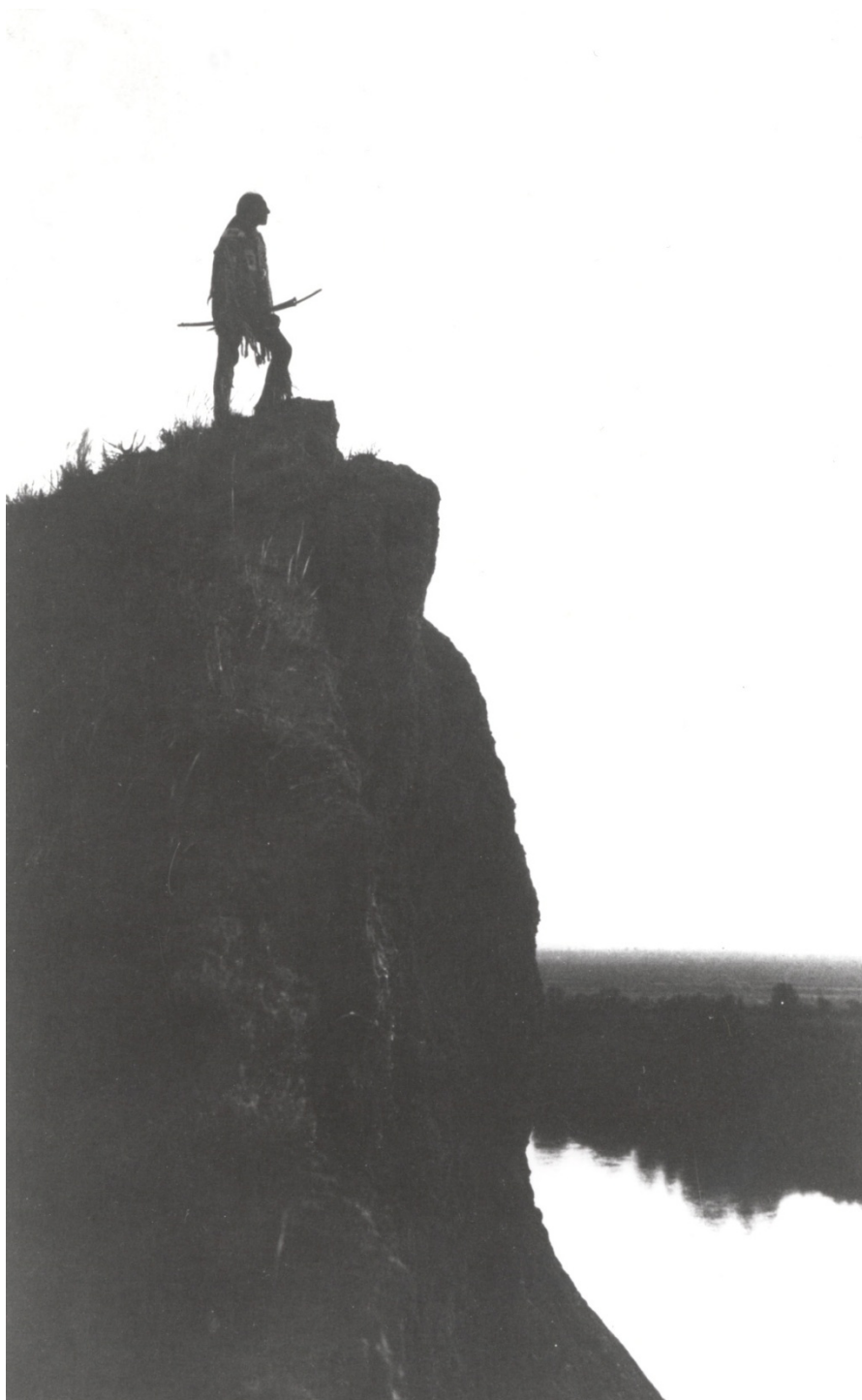
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Need to address issues in a comprehensive manner—medical, behavioral, public health...



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