# Impact of the Built and Natural Environment on American Indian Health

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#### **Traditional View of Public Health**



### Pine Ridge Reservation Fargo Minneapolis® Kyle, SD **©**0måha Salt Lake City Denver ® Kansas Cit🎾 **⊚**Wichita 95<sup>\\</sup>W 110่~ฟ 105<sup>^</sup>ัฟ 100 ^ เม







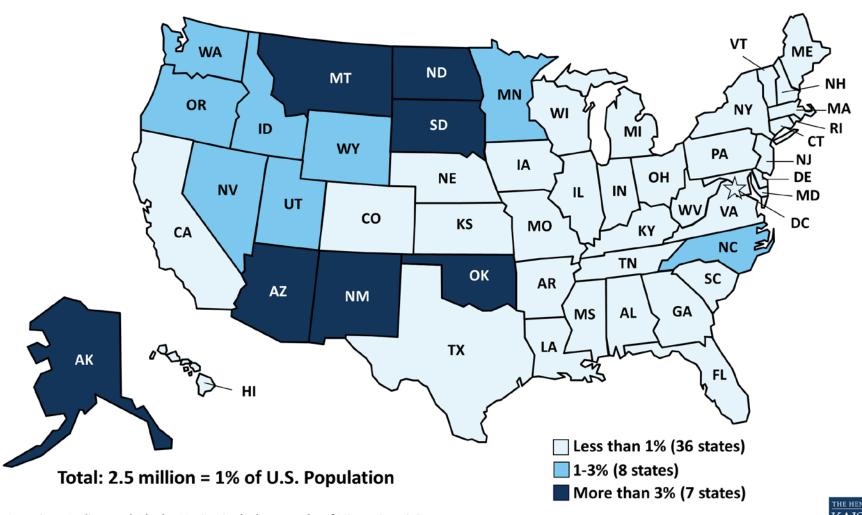




## **IHS** Areas



## 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.



## Al Health Disparities

Death rates from preventable diseases among Als are significantly higher than among non-Indians:

- Diabetes 208% greater
- Alcoholism 526% greater
- Accidents 150% greater
- Suicide 60% greater

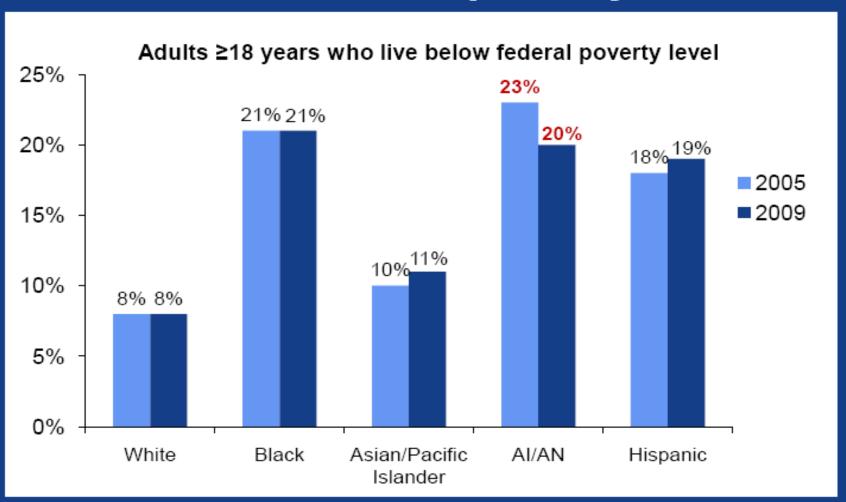
## Al Health Disparities

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

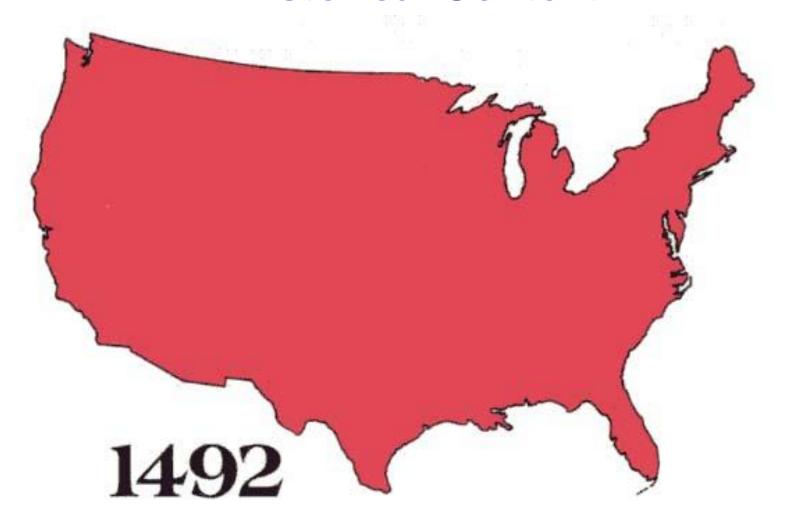
77.4 Years in the White Population

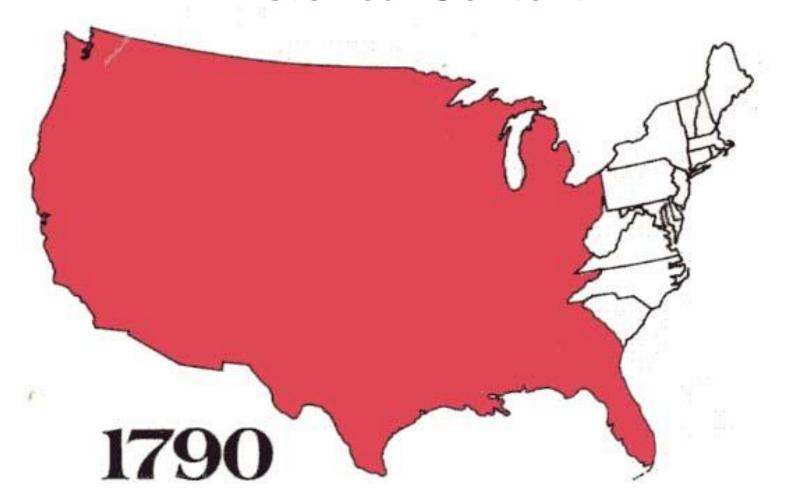
**56.6** Years in the Al Population

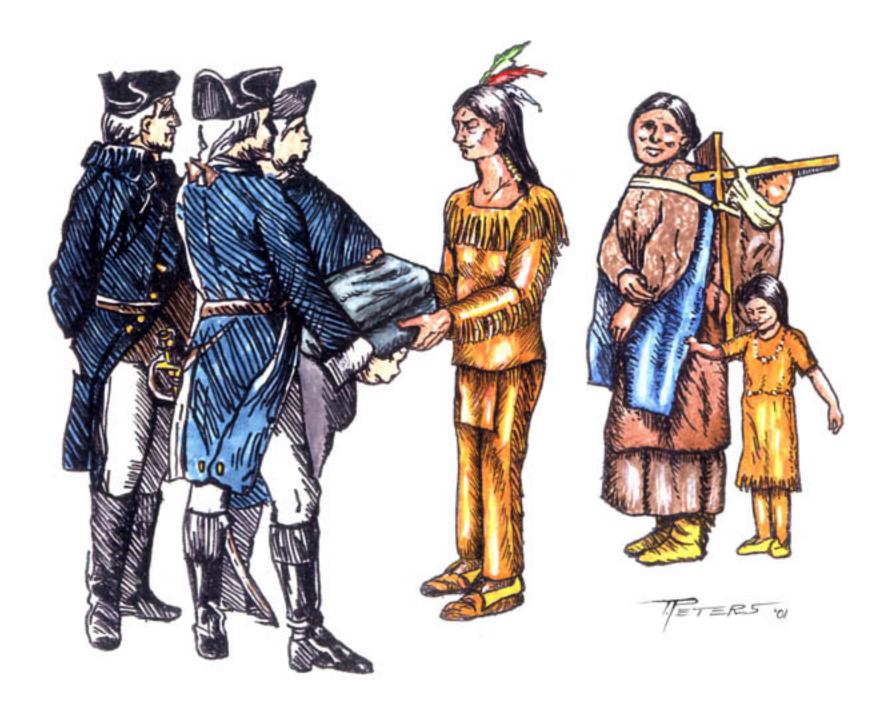
# 2.5 times as many Al/ANs as whites live below poverty level

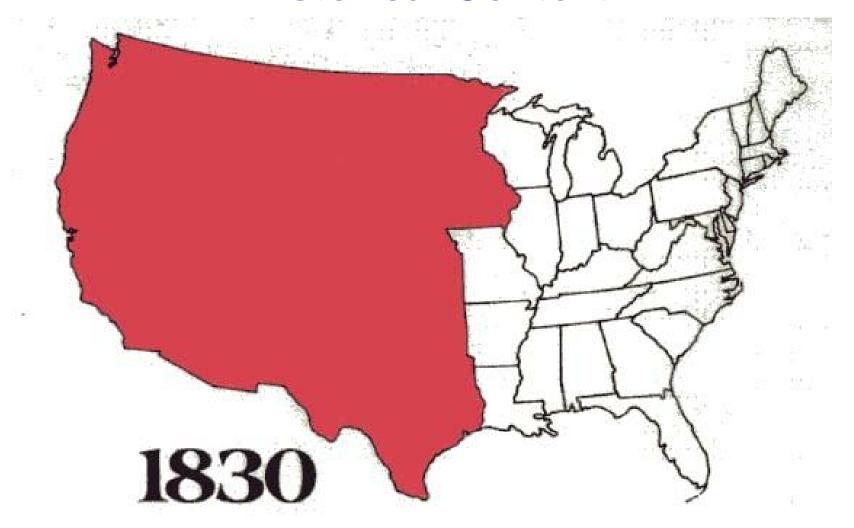


Source: CDC Health Disparities and Inequalities Report 2011, MMWR, Vo. 60

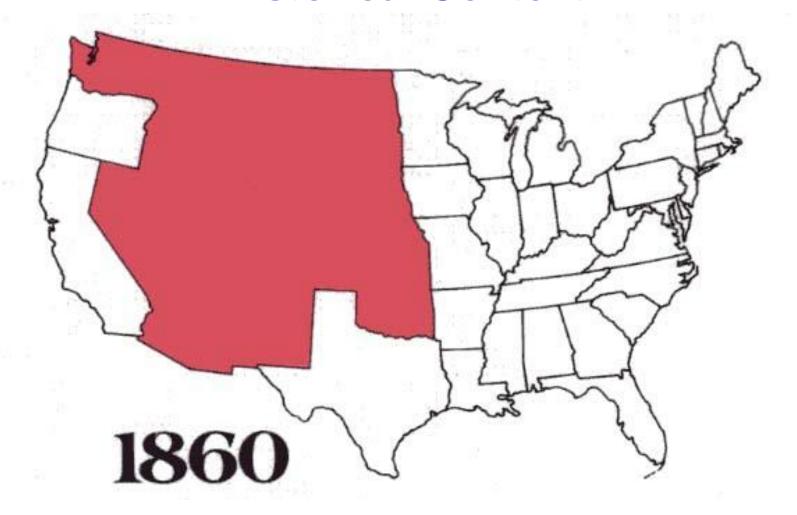




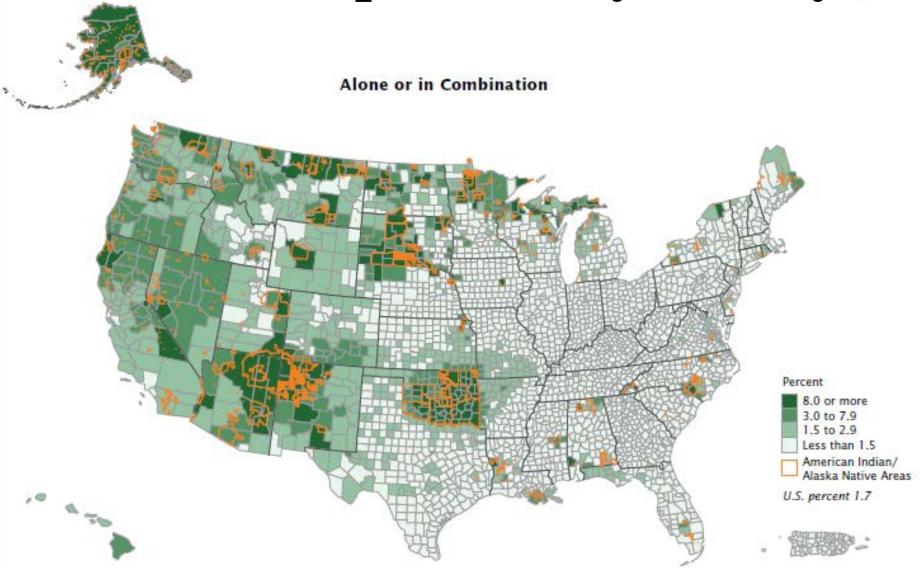




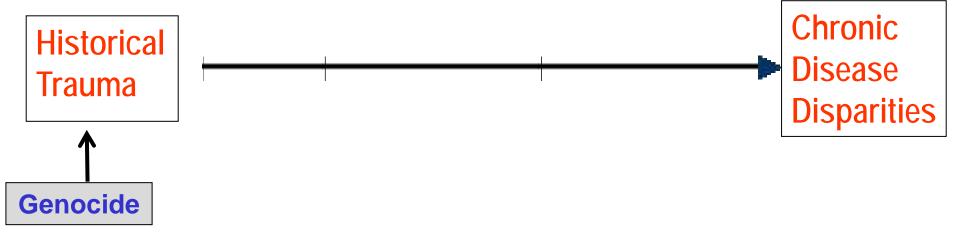




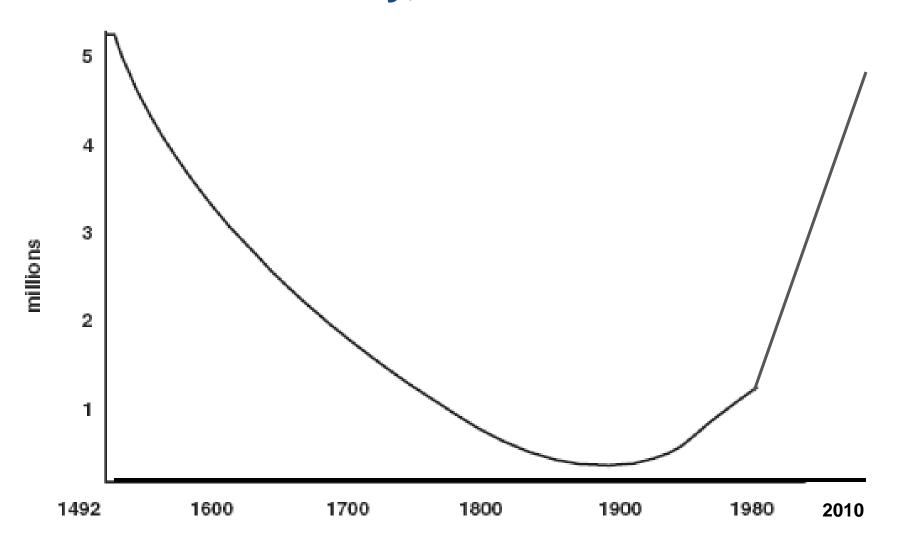
### AI/AN Population by County

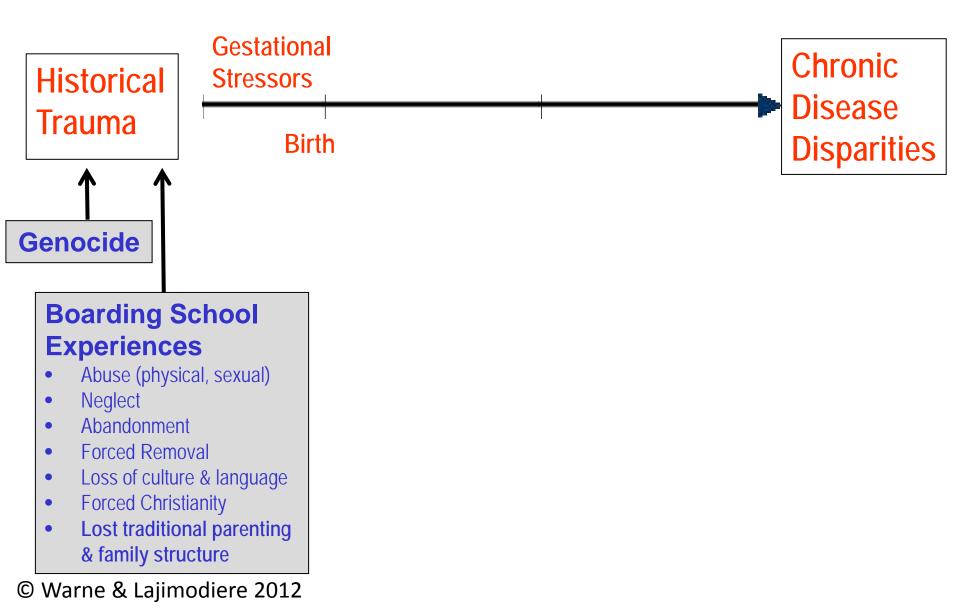


Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1.



# American Indian Population Decline and Recovery, 1492 – 2010

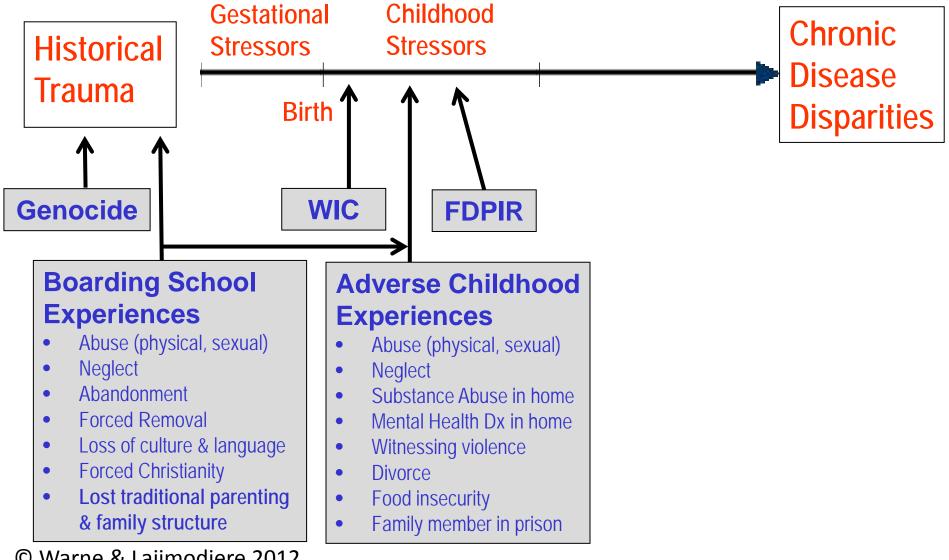




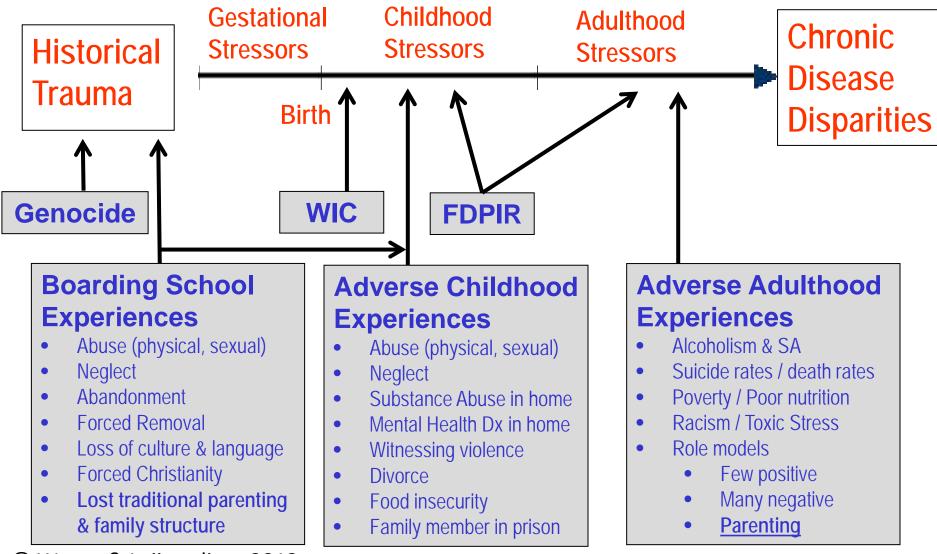
Historical trauma is the collective emotional wounding across generations that results from massive cataclysmic events – Historically Traumatic Events (HTE)\*



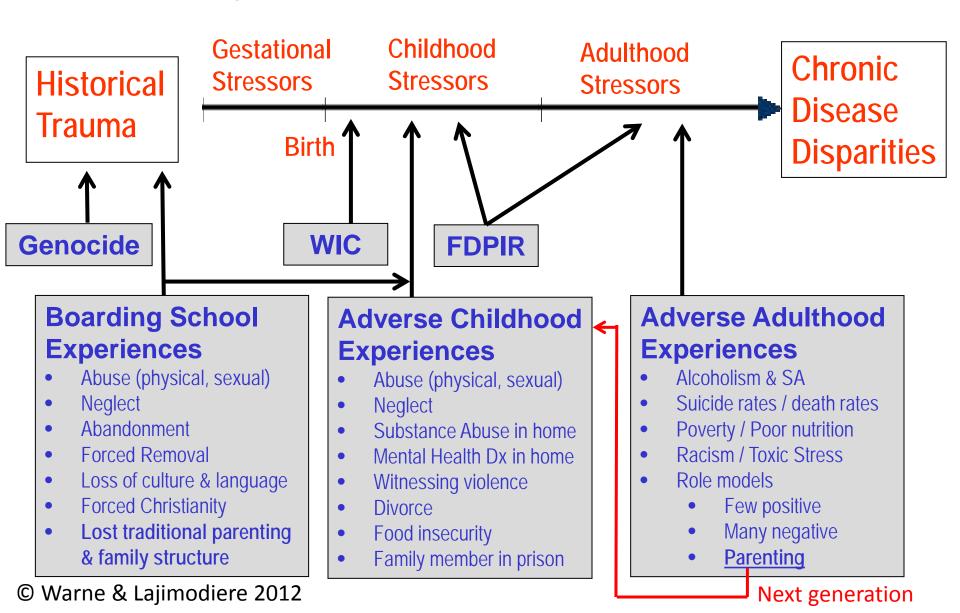
The trauma is held personally and transmitted over generations.
Thus, even family members who have not directly experienced the trauma can feel the effects of the event generations later



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© Warne & Lajimodiere 2012



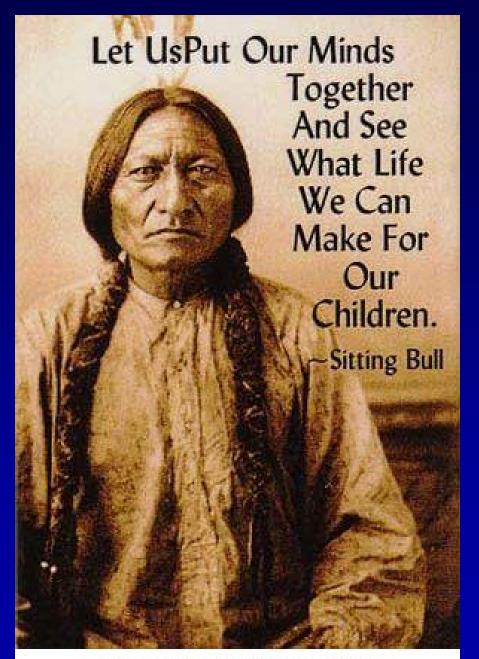
### Significant Challenges

#### **Social Determinants**

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

#### **Outcomes**

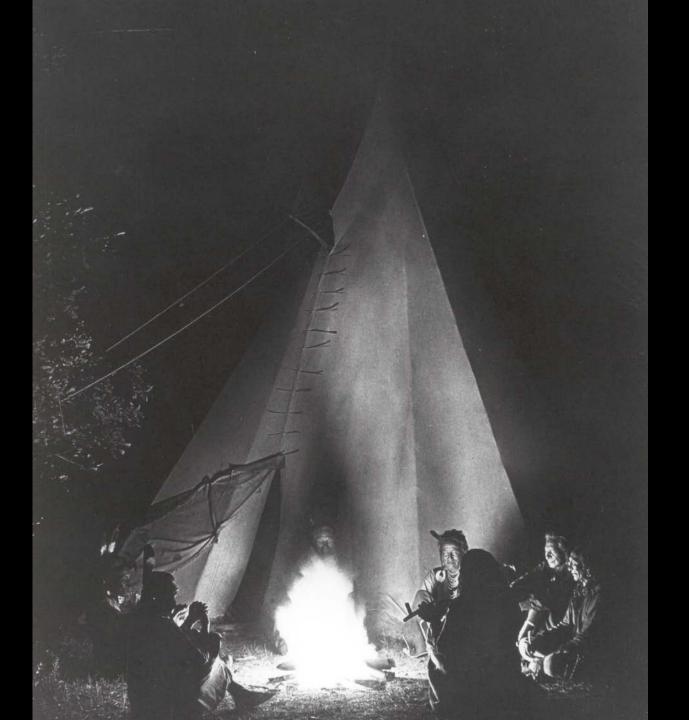
- Health Disparities
- Education Inequality
- Generational Poverty
- Ongoing Racism
- Worsening Inequity
- Suffering and Death



PICTUREQUOTES.COM

### MODERN TRADITIONAL

• Model Allopathic Holistic



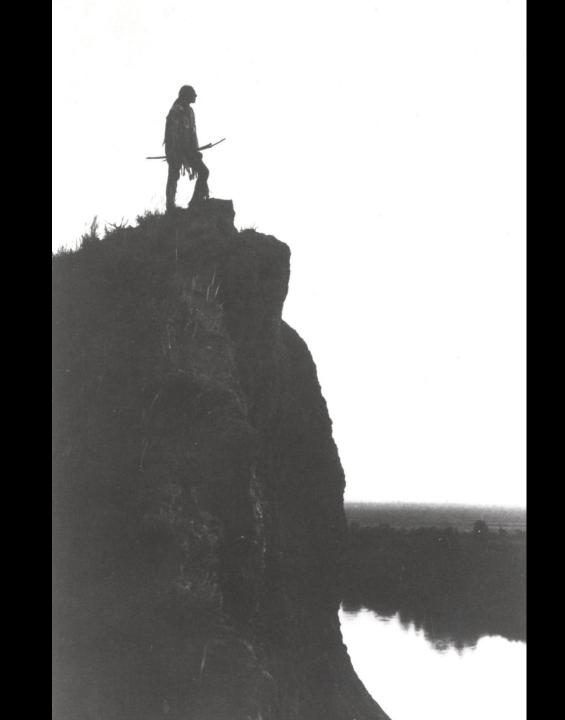
### **MODERN**

### **TRADITIONAL**

"Medicine"

**Physical** 

Spiritual



### **MODERN TRADITIONAL**

•Goal Cure/C

Cure/Control Individual Disease

Community Health



### MODERN TRADITIONAL

• Communication Linear Circular



## MODERN TRADITIONAL

Provider

Physician

Healer



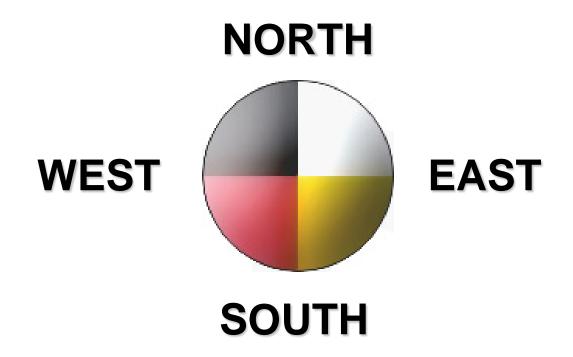
## MODERN TRADITIONAL

• Symbol Serpent & Staff Medicine Wheel

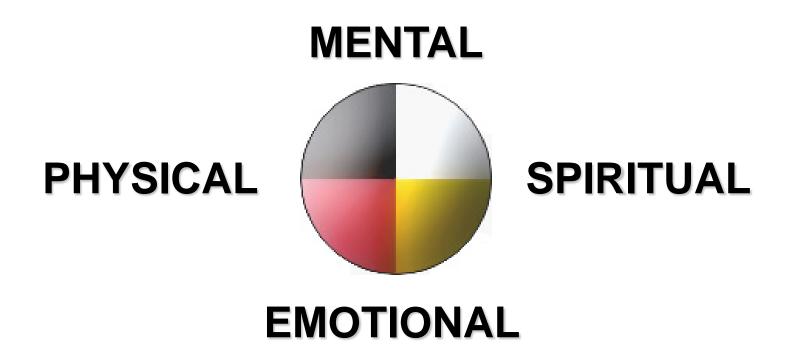




# MEDICINE WHEEL



## MEDICINE WHEEL



## MEDICINE WHEEL

#### **EDUCATIONAL**



# Ed McGaa, Eagle Man

Native American Indians learned how to live with the earth on a deeply spiritual plane. The plight of the non-Indian world is that it has lost respect for Mother Earth, from whom and where we all come.

# Ed McGaa, Eagle Man

We all start out in this world as tiny seeds no different from our animal brothers and sisters, the deer, the bear, the buffalo, or the trees, the flowers, the winged people. Mother Earth is our real mother, because every bit of us truly comes from her, and daily she takes care of us.



## **NDSU MPH Program Mission**

The program's mission is to promote health and well-being in diverse populations with an emphasis on American Indian and other underserved populations by providing educational, practical, and research opportunities for public health professionals.

### Specializations/Tracks

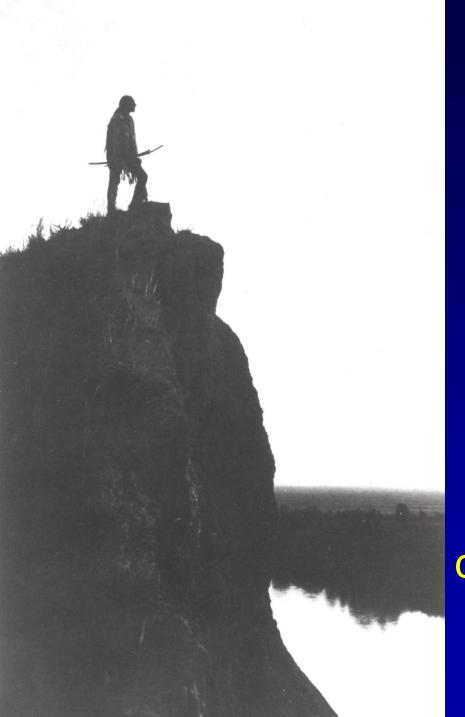
### **NDSU MPH Program**

- oHealth Promotion (CHES)
- Management of Infectious Diseases
- oPublic Health in Clinical Systems
- OAmerican Indian Public Health

### Specializations/Tracks

#### **American Indian Public Health**

- Required Courses
  - -American Indian Health Policy
  - American Indian Health Disparities
  - -Cultural Competence in Indian Health
  - Research Issues in Tribal Communities
  - –Case Studies in Indian Health



### **Donald Warne**

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