

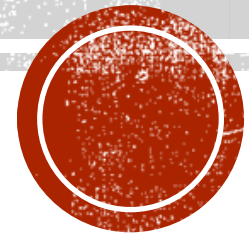
SYSTEMIC BARRIERS TO OPTIMAL HEALTH IN INDIGENOUS COMMUNITIES

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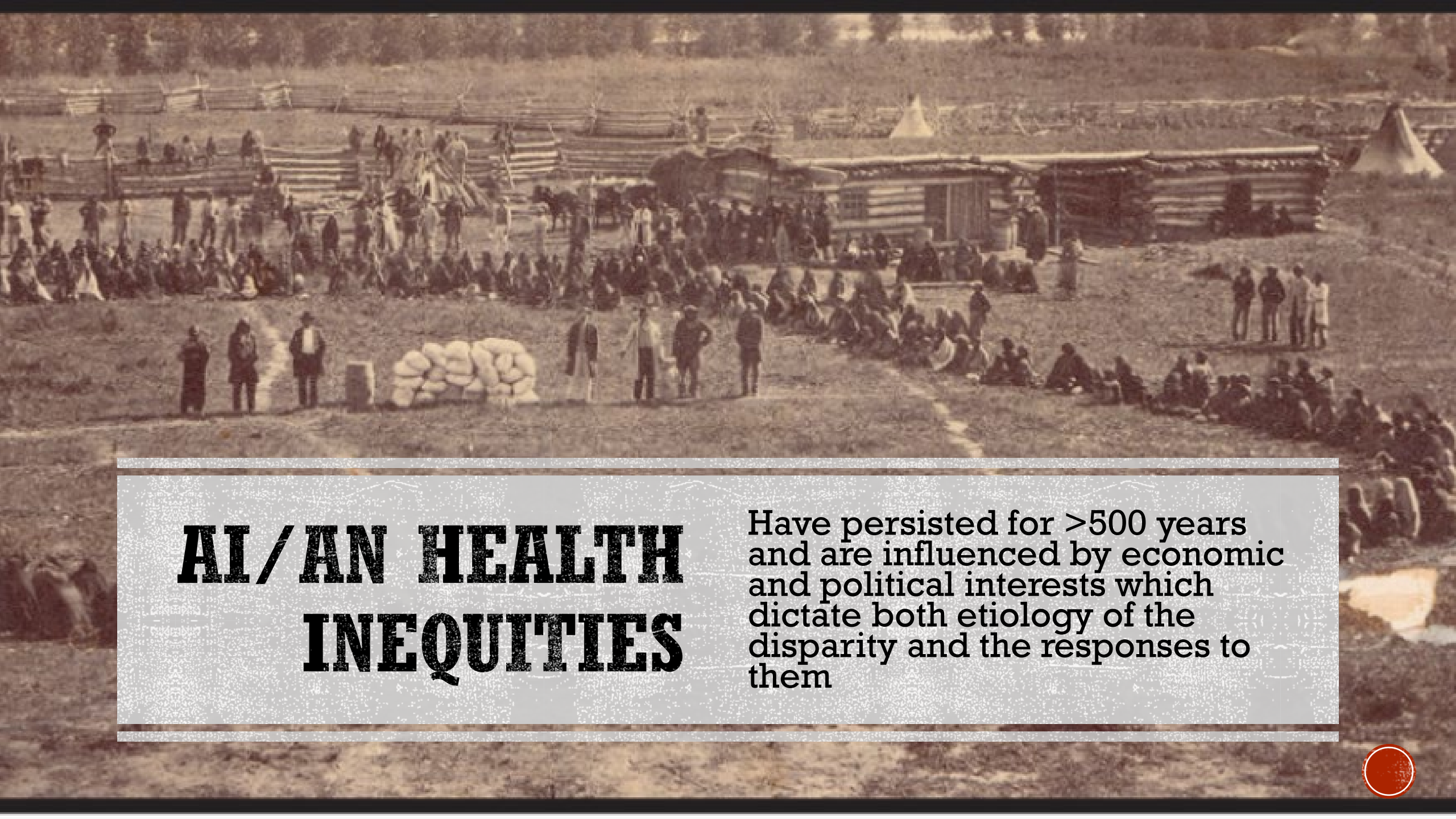


UW Medicine

CENTER FOR INDIGENOUS HEALTH

DISCLOSURE



A historical black and white photograph showing a large group of Native Americans gathered in an open field. In the background, there are several long log cabins and a few tipis. The people are dressed in traditional or early 20th-century clothing. The scene appears to be a reservation or a large gathering place.

AI/AN HEALTH INEQUITIES

Have persisted for >500 years and are influenced by economic and political interests which dictate both etiology of the disparity and the responses to them



MORTALITY DISPARITY RATES

American Indians and Alaska Natives (AI/AN) in the IHS Service Area

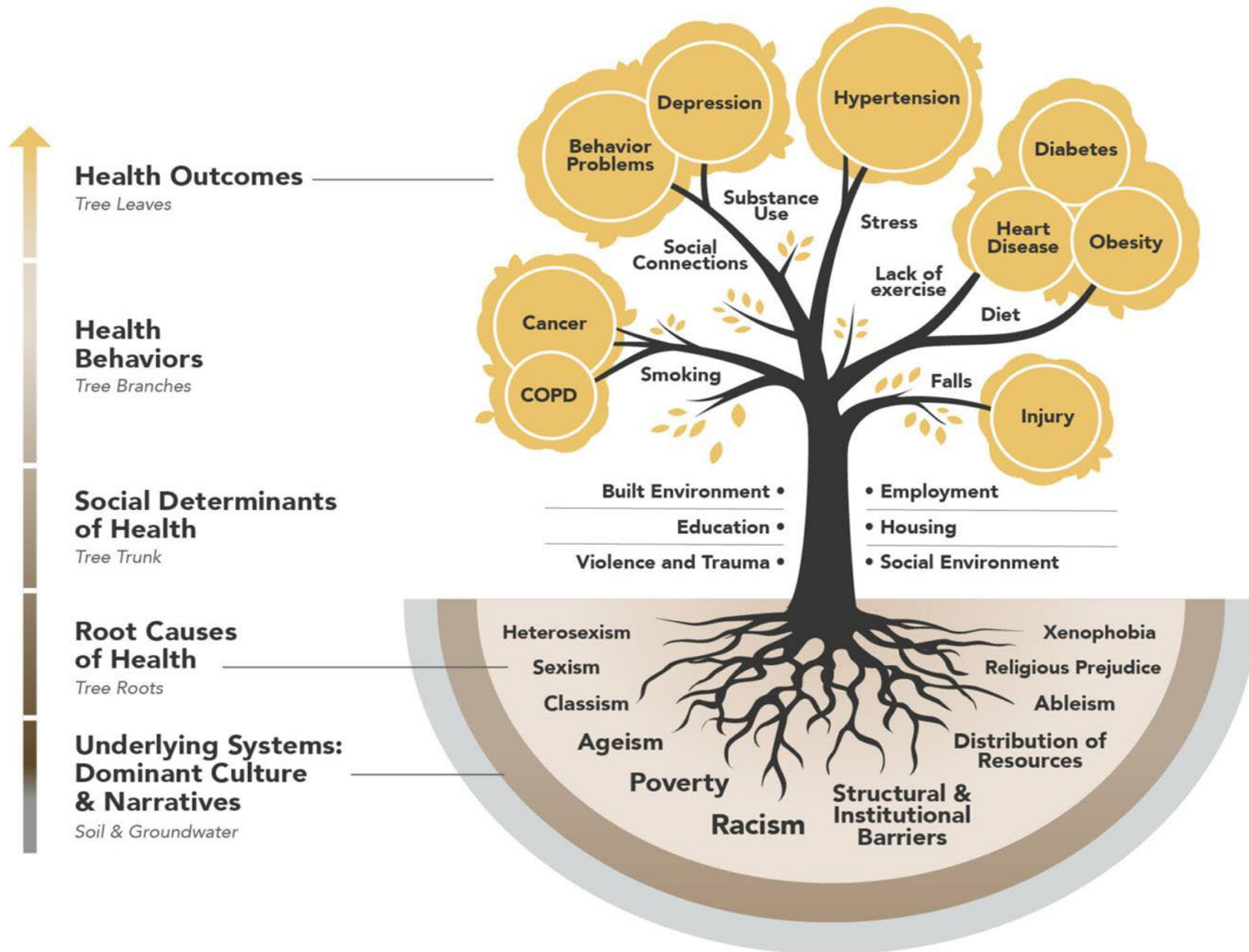
2009-2011 and U.S. All Races 2010

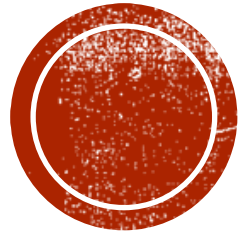
(Age-adjusted mortality rates per 100,000 population)



	AI/AN Rate 2009-2011	U.S. All Races Rate – 2010	Ratio: AI/AN to U.S. All Races
ALL CAUSES*	999.1	747.0	1.3
Diseases of the heart (heart disease)	194.1	179.1	1.1
Malignant neoplasm (cancer)	178.4	172.8	1.0
Accidents (unintentional injuries)*	93.7	38.0	2.5
Diabetes mellitus (diabetes)	66.0	20.8	3.2
Alcohol-induced	50.5	7.6	6.6
Chronic lower respiratory diseases	46.6	42.2	1.1
Cerebrovascular disease (stroke)	43.6	39.1	1.1
Chronic liver disease and cirrhosis	42.9	9.4	4.6
Influenza and pneumonia	26.6	15.1	1.8
Drug-induced	23.4	12.9	1.8
Nephritis, nephrotic syndrome (kidney disease)	22.4	15.3	1.5
Intentional self-harm (suicide)	20.4	12.1	1.7
Alzheimer's disease	18.3	25.1	0.7
Septicemia	17.3	10.6	1.6
Assault (homicide)	11.4	5.4	2.1
Essential hypertension diseases	9.0	8.0	1.1
* Unintentional injuries include motor vehicle crashes.			
NOTE: Rates are adjusted to compensate for misreporting of American Indian and Alaska Native race on state death certificates. American Indian and Alaska Native age-adjusted death rate columns present data for the 3-year period specified. U.S. All Races columns present data for a one-year period. Rates are based on American Indian and Alaska Native alone; 2010 census with bridged-race categories.			







HISTORICAL TRAUMA





COLONIZATION LED TO ...

- Genocide
- Loss of land
- Pervasive poverty
- Loss of traditions and culture
- Assimilation



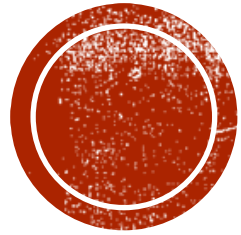


BOARDING SCHOOL EXPERIENCES



- Loss of the traditional family unit
- Loss of culture
- Psychologic and physical abuse
- Toxic stress
- Adverse childhood experiences





ADVERSE CHILDHOOD EXPERIENCES



Research Article

Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults

The Adverse Childhood Experiences (ACE) Study

Vincent J. Felitti, MD, FACP, Robert F. Anda, MD, MS, Dale Nordenberg, MD, David F. Williamson, MS, PhD, Alison M. Spitz, MS, MPH, Valerie Edwards, BA, Mary P. Koss, PhD, James S. Marks, MD, MPH

American Journal of Preventive Medicine. 1998, Volume 14, pages 245–258



ADVERSE CHILDHOOD EXPERIENCES

- Physical abuse
- Emotional abuse
- Sexual abuse
- Family substance abuse
- Family mental illness
- Incarcerated family member
- Parental separation/divorce
- Seeing mother physically abused
- Physical neglect
- Emotional neglect

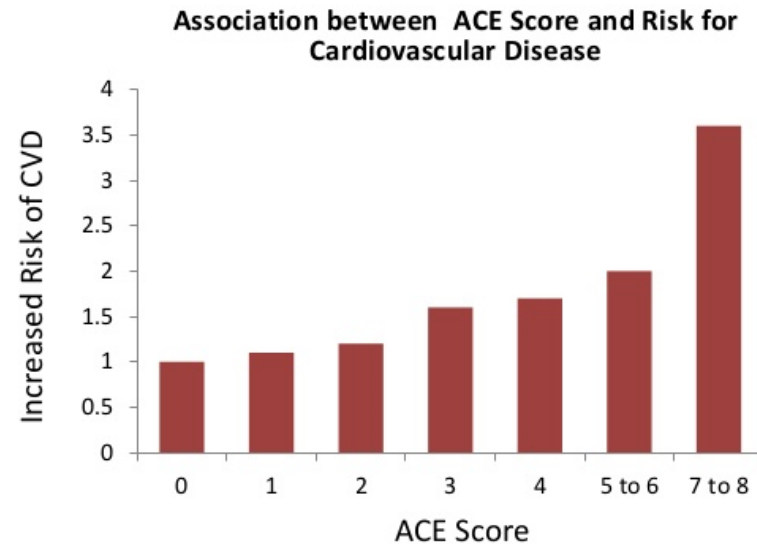
ACE score = number of categories experienced before age 18



ACES HAVE LONG LASTING EFFECTS . . .

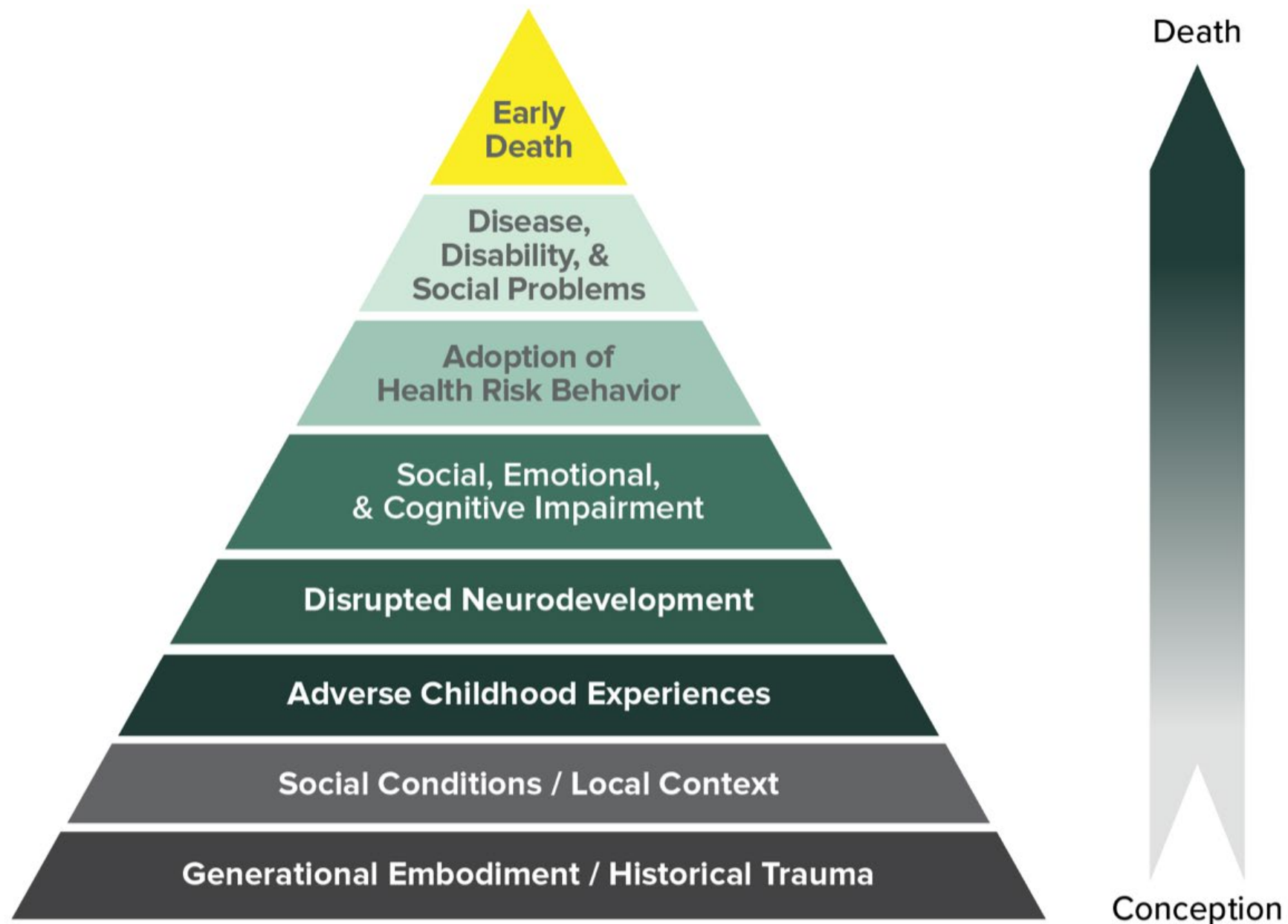
- Health (CVD, obesity, DMII, depression, cancer, STIs)
- Behaviors (smoking, EtOH, drug use)
- SES (graduation rates, academic achievement)

Graded Relationship Between ACE Score and Cardiovascular Disease



Adapted from Dong et al., 2004





**Mechanism by which Adverse Childhood Experiences
Influence Health and Well-being Throughout the Lifespan**



Adverse Childhood Experiences (ACE) among American Indians in South Dakota and Associations with Mental Health Conditions, Alcohol Use, and Smoking

Donald Warne, MD, MPH

Kristen Dulacki, MPH

Margaret Spurlock, MPH

Thomas Meath, MPH

Melinda M. Davis, PhD

Bill Wright, PhD


K. John McConnell, PhD

- 516 AI adults in South Dakota
- 45.4% had an ACE score of ≥ 3 compared to 17.4% of region matched controls

Journal of Health Care for the Poor and Underserved 28 (2017): 1559–1577

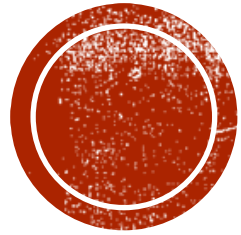


COVID-19–Associated Orphanhood and Caregiver Death in the United States

Susan D. Hillis, PhD ; Alexandra Blenkinsop, PhD; Andrés Villaveces, MD, PhD; Francis B. Annor, PhD; Leandris Liburd, PhD; Greta M. Massetti, PhD; Zewditu Demissie, PhD; James A. Mercy, PhD; Charles A. Nelson III, PhD; Lucie Cluver, PhD; Seth Flaxman, PhD; Lorraine Sherr, PhD; Christl A. Donnelly, ScD; Oliver Ratmann, PhD; H. Juliette T. Unwin, PhD

- April 1, 2020 through June 30, 2021
- Compared to white children, AIAN children were 4.5 times more likely to lose a parent or grandparent caregiver
- 1 of every 168 AI/AN children lost a primary or secondary caregiver



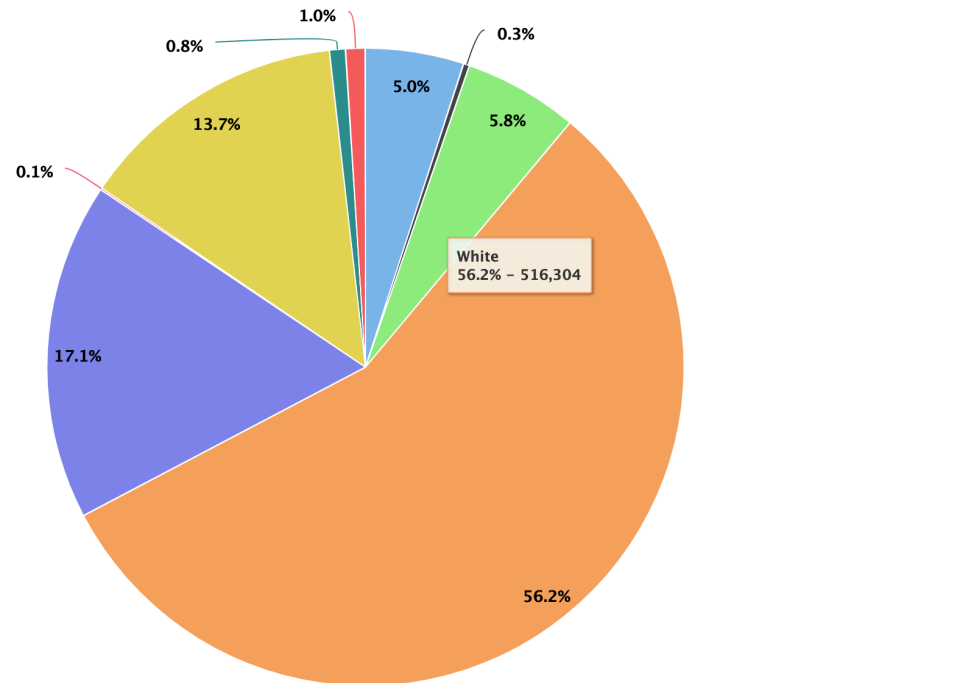


POOR REPRESENTATION IN MEDICINE



LACK OF DIVERSITY IN MEDICINE

Figure 18. Percentage of all active physicians by race/ethnicity, 2018.



Click on legend item below to add or remove a section from the report.

- American Indian or Alaska Native (2,570)
- Asian (157,025)
- Black or African American (45,534)
- Hispanic (53,526)
- Multiple Race, Non-Hispanic (8,932)
- Native Hawaiian or Other Pacific Islander (941)
- Other (7,571)
- Unknown (126,144)
- White (516,304)

<https://www.aamc.org/data-reports/workforce/interactive-data/figure-18-percentage-all-active-physicians-race/ethnicity-2018>





- Health inequities are common in Indigenous communities
- Colonization elaborated ongoing systemic racism which continues cause adverse social drivers of health
- Acknowledging this traumatic history is a necessary first step, though truly addressing these health inequities requires systemic solutions, such as expanding educational opportunities for Natives



A group of children, likely Indigenous, are gathered around a large, circular drum. They are wearing traditional regalia, including feathered headdresses and beaded necklaces. The drum has a patterned surface with red, white, and black geometric designs. The children are holding paddles, suggesting they are participating in a drumming ceremony or performance. The background is a grassy field.

NIITSIN'YII'TAKI (THANK YOU)!

jason.deen@seattlechildrens.org