Social Determinants of Inequities in Obesity Prevention and Control: American Indian/Alaska Native Population Focus

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Population Introduction:
American Indian and Alaska Native as a Percentage of County Population

Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1
Obesity and American Indians/Alaska Natives

- Data from the National Health Interview Survey found that 71.6% of Native adults were classified as overweight or obese\(^1\)

- Native children have the highest prevalence of obesity of any racial/ethnic group (42% compared to 31% among Black and 30% among Hispanics)\(^2\)

- Multilevel interventions are urgently needed, however few such interventions have been developed and implemented with Native communities and virtually none have been developed and implemented within urban Native communities\(^3\)


A Disproportionate Burden: Age-adjusted % of people aged 20 years old and older with diagnosed diabetes, by race/ethnicity, United States, 2010-2012

- American Indians/Alaska Natives: 15.9%
- Non-Hispanic blacks: 13.2%
- Hispanics: 12.8%
- Asian Americans: 9.0%
- Non-Hispanic white: 7.6%

American Indians and Alaska Natives: Racial and Political Identities

- Indigenous health inequalities arise from general socioeconomic factors in combination with culturally and historically specific factors.
- The historical experiences of Native Americans—epidemic disease, removal and restriction to reservations, and forced assimilation and urbanization—have shaped the contemporary health disparities of these populations.

Tribal Nations and American Governments through History

- 1492-1828: Colonial Period
- 1828-1887: Removal, Reservation, & Treaty Period
- 1887-1934: Allotment & Assimilation Period
- 1934-1945: Indian Reorganization Period
- 1945-1968: Termination Period
- 1968-2000: Self-Determination Period
- 2000- Present: Nation-to-Nation Period
Social Determinants of Inequalities among American Indians/Alaska Natives

According to American Community Survey data (2017):

- 28.3% of Natives live in poverty, nearly twice the national rate of 15.5%, and the highest of any racial or ethnic group;
- the median Native household income for Natives is $37,227 compared to $53,657 for the nation as a whole;
- 23.1% of Natives lack health insurance coverage, compared to the national average of 11.7%;
- the percentage of Natives who drop out of school is 11%, compared to 5% of non-Hispanic Whites

Food environments: characteristics and associated correlates in Native communities

- Native communities lack access to healthy foods\textsuperscript{5,6}

- Foods in Native communities are more expensive than in neighboring non-Native communities\textsuperscript{7}

- Food insecurity is 4x higher in Native communities (62\%) than in the US general population (15\%), and is associated with obesity, diabetes, and hypertension\textsuperscript{6}

- Natives rely on convenience stores that sell foods primarily high in fat, sugar and sodium\textsuperscript{5,6}


Removal and Restriction to Reservations and the Impact on American Indians

• The removal and restriction of Natives to reservations resulted in reliance on the Food Distribution Program on Indian Reservations instituted by the U.S. Department of Agriculture

• This monthly program provides canned and packaged surplus foods, most of which were high in sugar and fat

• It has been associated with the significant prevalence of obesity, diabetes, and hypertension among Natives

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Loss of Land and Loss of Health/Wellness

• Wellness among many Indigenous peoples is community-centered, as people belonging to one's own community, the land, and its animals are all viewed as inherently a part of the self.\textsuperscript{9} Few models (and measures) of wellness/health represent this holistic concept.\textsuperscript{10}

• Colonization disrupted the crucial bond with the land and the natural environment that is a key feature of indigeneity, and is mirrored by systems of knowledge and societal arrangements\textsuperscript{10}

• Loss of land for many results in loss of knowledge, foods, culture, and ultimately purpose and meaning\textsuperscript{11}

• Studies have shown that mental health and physical health improves when Native people eat traditional foods, engage in traditional activities (i.e. stickball, hula) and “spend time on the land.”\textsuperscript{12,13}


Key Implications:

• Due to their sovereign status, national and state obesity policies may not directly reach tribal citizens

• Existing research has focused on state/national policies, has excluded tribes

• The generalizability of “evidence-based” obesity programs/policies in the context of tribal settings is unclear; lack of indigenous models of wellness within scientific literature

• The 566 tribal nations have unique and diverse cultural, geographic, and political infrastructures that may influence obesity programs and policies

• Many tribes are uniquely positioned, and inherently motivated, to implement obesity policies, given tribal citizen healthcare costs
Key Implications:

- Funded projects must be rigorously designed and evaluated
- Tribal nations/communities must have the capacity and infrastructure to implement policies
- Researchers and health planners must be familiar with tribal policymaking processes
- Tribal leadership must be equipped with health impact and cost effectiveness tools to make informed decisions
- Tribal economic sovereignty must be incorporated into obesity policymaking
Summary Recommendations

- Use participatory approaches that respect tribal sovereignty, including economic sovereignty
- Fund studies that are culturally-centered, with rigorous designs, and strong evaluation components
- Build research and implementation capacity of tribes and research partnerships
- Translate implementation knowledge of practitioners and disseminate findings
- Include a focus on AI/ANs residing in urban areas