

Diabetes Among American Indians and Alaska Natives in California: Prevention is the Key

Delight Satter, MPH; Nilka Ríos Burrows, MT, MPH; Melissa Gatchell; Maile Tauali'i; D. Tecumseh Welch, JD

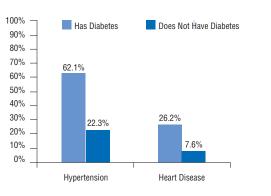
alifornia is home to more American Indian and Alaska Natives (AIANs) than any other state in the U.S. with 627,600 people. An estimated 14% of the native population are members of California's Indigenous tribes. There are 107 federally recognized tribes in California, more than any other state, except Alaska.

Diabetes, a serious and growing public health problem, is the sixth leading cause of death in the U.S. and the seventh in California. It is also the leading medical cause of amputations, blindness, and kidney disease. In California, diabetes affects more than 1.4 million or 5.9% of adults over the age of 18. Approximately 30,000 AIAN adults (7.4%) have been diagnosed with diabetes. Prevalence increases with age – 2.6% of AIAN adults between the ages of 18 and 44 report having diabetes, increasing to 8.9% among those aged 45–54, 15.3% among those aged 55–64, and 21.9% among those age 65 and older.¹

Diabetes and Co-morbidities

Diabetes is a risk factor for health conditions such as hypertension, heart disease and stroke.

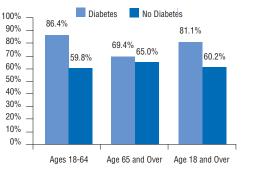
- Approximately three out of every five AIAN adults with diagnosed diabetes in California (62.1%) have also been diagnosed with hypertension, nearly 2.8 times the rate of adults not diagnosed with diabetes (Exhibit 1).
- In addition, a comparison of co-morbidity rates among AIAN adults to Healthy People 2010 objectives demonstrates that AIANs fall especially short of targets for high blood pressure and oral health (data not shown).
- Approximately one in four AIAN adults with diagnosed diabetes in California (26.2%) have also been diagnosed with heart disease, nearly 3.4 times the rate of adults not diagnosed with diabetes (Exhibit 1).
- Surprisingly, the data showed relatively small differences (non-significant) between urban and rural AIAN populations, thus it was not discussed in this fact sheet.
- 2 Beginning in 1998, the U.S. Census Bureau ceased counting IHS eligibility as health insurance coverage, thus it is excluded from the non-IHS coverage section.



Risk Factors for Diabetes

Being overweight or obese greatly increases the risk of developing diabetes.

- Approximately four in five AIAN adults with diabetes (81.1%) are overweight or obese. This proportion is highest among AIAN adults ages 18-64 (86.4%).
- Compared with AIAN adults of normal weight, overweight or obese AIAN adults are 2.6 times more likely to have diabetes (data not shown).



Note: Body mass index (BMI) was calculated based on respondent reports of weight and height. A BMI of 25-29.9 is considered overweight and a BMI of 30 and over is considered obese.

Note: Further age category breakdown was not possible because estimates were not statistically stable (coefficient of variation above 30%).

Health Insurance Coverage

The only recognized "political minority" in the U.S., members of federally-recognized tribes have legal rights to health care. In California, some American Indians are not members of federally-recognized tribes, but they are legally eligible for Indian Health Service (IHS) programs November 2003

EXHIBIT 1:

Percent of AIAN Adults with Hypertension and Heart Disease, by Diabetes Status, Age 18 and Over, California, 2001 Source: 2001 California Health Interview Survey

EXHIBIT 2:

Percent of AIAN Adults Who Are Overweight/Obese, by Age and Diabetes Status, Age 18 and Over, California, 2001 Source: 2001 California Health Interview Survey if they can prove descent from the California Judgment rolls. These members, living on or near their home federal reservation lands, receive health care at no charge through IHS. Only 4.5% of AIAN adults report being covered by IHS.

Almost one in five AIAN adults between the ages of 18 and 64 (19.4%) report being uninsured.² Most AIAN adults with diabetes have some form of non-IHS health insurance coverage -31.1% report having Medi-Cal coverage and 56.9% report having employment-based coverage.

Access to Care

Over six in ten AIAN adults over the age of 18 with diabetes (64.8%) live below 300% of the Federal Poverty Level (FPL), compared to just over half of AIAN adults without diabetes (53.3%). Almost one in three AIAN adults over the age of 18 with and without diabetes (31.1%) reported at least some type of delay in seeking care.

Policy Issues and Recommendations

AIAN adults in California have high rates of access to diabetes care measures (e.g. annual foot exams and selfblood-glucose-monitoring). However, this population has moderate rates of uninsurance and is at significant risk for diabetes as seen in the high rates of obesity, including in younger populations. A focus on prevention and control of obesity, co-morbidities of diabetes – such as hypertension and heart disease – and oral health, are greatly needed for the AIAN population.

The current downturn in the economy is increasing the burden on an already overworked, inadequate system of care. As unemployment increases, so do the demands on a poorly funded health system for the AIAN population. Yet, federal funding remains far behind the increases in medical care costs for AIANs. State contributions to Indian health programs have been almost flat and are currently in jeopardy of significant reductions.

Policymakers, researchers and health advocates at the federal, state, tribal and urban Indian level should place greater emphasis on programs and funding for:

- Prevention of diabetes for younger generations
- Prevention of obesity a major risk factor for diabetes
- Prevention and control of co-morbidities of diabetes, such as hypertension and heart disease
- Expansion of IHS and state programs' coverage, fulfilling both the federal and state obligation of health care
- Preparation of "mainstream" health delivery services to serve native people, especially in the state with the largest population of AIANs

■ Conducting additional studies of sub-AIAN populations, such as immigrant-AIAN and non-U.S. federally-recognized AIANs, to identify key diabetes prevention and control issues in California.

For more information on American Indians and Alaska Natives by urban and rural constructs, please visit *http://www.chis.ucla.edu/.*

For information on Diabetes Prevalence and Management, please see the Diabetes Public Health Resource website at *http://www.cdc.gov/diabetes*.

Author Information

Delight Satter, MPH, (Umpqua, The Confederated Tribes of Grand Ronde) is the Director of the American Indian and Alaska Native Research Program at the UCLA Center for Health Policy Research; Nilka Ríos Burrows, MT, MPH, is an epidemiologist with the Indian Health Services, National Diabetes Program and the Centers for Disease Control and Prevention, Division of Diabetes Translation; Melissa Gatchell is a Graduate Student Researcher at the UCLA Center for Health Policy Research; Maile Tauali'i (Native Hawaiian) is a Program Manager with the Seattle Indian Health Board, Urban Indian Health Institute; D. Tecumseh Welch, JD, (Blackfeet) is Director of Policy and Health Legislation for the Riverside and San Bernardino County Indian Health Inc.

Data Source

This fact sheet is based on data from the 2001 California Health Interview Survey (CHIS 2001). CHIS 2001 completed interviews with 55,428 adults, 5,801 adolescents ages 12-17, and 12,592 parents of young children ages 0-11. This fact sheet uses the CHIS 2001 RDD sample and defines AIAN as any person who self-identified as AIAN alone or in combination with any other race (n=3,990); it does not exclude immigrant indigenous, persons from non-federally recognized tribes, or AIANs who are of Latino ethnicity. Within this group, 266 AIAN adults reported having diabetes. The data were weighted based on the 2000 Census.

The California Health Interview Survey (CHIS) is a collaboration of the UCLA Center for Health Policy Research, the California Department of Health Services, and the Public Health Institute. Funding for CHIS 2001 was provided by the California Department of Health Services, The California Endowment, the National Cancer Institute, the California Children and Families Commission, the Centers for Disease Control and Prevention (CDC), and the Indian Health Service. For more information on CHIS, visit www.chis.ucla.edu.

The views expressed in this policy brief are those of the authors and do not necessarily represent the UCLA Center for Health Policy Research or the Regents of the University of California. Copyright © 2003 by the Regents of the University of California. All Rights Reserved. *Editor-in-Chief: E. Richard Brown, PhD; Communications Assistant: Celeste Maglan; Editing/Production Services: Sheri Penney, Penney Layne Productions; Graphic Production: Donna Beilock, Ikkanda Design Group* The UCLA Center for Health Policy Research is based in the UCLA School of Public Health and is also affiliated with the UCLA School of Public Policy and Social Research



The development and publication of this fact sheet were funded by a grant from The California Endowment.

FS2003-11