APIAHF
HEALTH BRIEF

SAMOANS
IN THE UNITED STATES

HISTORY

The Samoan people are Polynesians who have migrated west from places such as the East Indies, the Malay Peninsula, or the Philippines (Hubbell et al., 2005). Samoa (which is formerly Western Samoa) became an independent nation while American Samoa is an unincorporated territory of the US. The Samoan Islands are located in the South Pacific between Hawaii and Australia.

DEMOGRAPHICS

The 2000 U.S. Census counted 128,183 Samoans (alone or in combination with another race) in the 50 states and District of Columbia. More than 85,000 indicated they were Samoan (one race). Pacific Islanders (PI) make up 0.13 percent of the U.S. population. Samoans are the second largest PI group, comprising 22.5% of the total PI population. The top three places of residence for Samoans are Hawaii, California, and Washington. Compared to the general population, Pacific Islanders are a relatively young group. The median age of Samoans is 24.4 compared to the national median of 35.4 (US Census Bureau, 2005).

Life expectancy for Samoan men (71.0 years) and Samoan women (74.9 years) is lower than white men (73.2 years) and white women (79.6 years) respectively (US Census Bureau, 2000).

The population of American Samoa in 2000 was 57,291, of whom 92% were Samoan (U.S. Census Bureau, 2003).

Unless otherwise stated, "national data" on English language proficiency, income and poverty, and educational attainment only cover the 50 states and District of Columbia.

ENGLISH LANGUAGE PROFICIENCY

The ability to speak English has a tremendous impact on access to health information, public services (i.e. Medicaid, Medicare, SCHIP), effective communication with providers and emergency personnel, and the ability to understand and utilize medications properly.

Fifty-three percent of Samoans speak a language other than English at home, but only 7% are linguistically isolated. Sixteen percent of Samoans are limited English proficient, twice the U.S. average of 8% (APIAHF, 2005).

POVERTY/INCOME

The relationship between income and health has been well established over the years. Poverty and lower income have been correlated with high rates of death and disease while higher income has been correlated with better health status. Large disparities in income have been linked to lower life expectancy in cross-national comparisons as well as higher mortality and obesity rates at the state level.

Median household income is about the same for Samoans compared to the general population ($40,058 vs. $41,994); however Samoan households are significantly larger than the U.S. average (4.1 people vs. 2.6). Lower socioeconomic status is even more pronounced when examining poverty rates, as 20.2% of Samoans live below the poverty threshold compared to 12.4% of the total population (APIAHF, 2005).

EDUCATIONAL ATTAINMENT

According to the Institute of Medicine (IOM), the likelihood of being insured rises with higher levels of educational attainment. Having a college degree is strongly associated with multiple factors that increase the likelihood of being insured—employment in sectors that are more likely to offer coverage, higher income, and a greater likelihood of choosing employment-based coverage if offered. Previous studies of Census data have shown that adults who did not graduate from high school were almost twice as likely to be uninsured as those with a high school diploma (38.5% compared to 19.6%)(APIAHF, 2005).

Twenty-three percent of Samoans have less than a high school diploma, compared to 20% of the U.S. Fifty-nine percent have a high school diploma as their highest degree, which is higher than the U.S. average of 50%. However, only 8% have a Bachelor's as their highest degree, which is only half of the U.S. average of 16% (APIAHF, 2005).

HEALTH STATUS

It is difficult to characterize the health status of Samoans. Many studies do not differentiate between the various ethnicities studied. Small sample sizes make it difficult to generalize research findings. Finally, in some cases, data are just not available. For these reasons, the data contained here provide only a rough estimate of Samoan health status.

CHRONIC DISEASES

HYPERTENSION

A cross-sectional study to determine the interactions between lifestyle incongruity and anger expression on blood pressure (BP) in 376 men and women 25-65 years of age from Samoa found that in women <40 years of age with a material lifestyle relatively lower than their educational rank, anger suppression is associated with higher adjusted systolic BP. In young men whose material lifestyle is relatively lower than their occupational rank, those who report frequent experiences of Samoan culture-specific anger feelings have higher adjusted diastolic BP. The authors hypothesize that among young women, the higher BP may be due to stress arising from both a normative proscription against emotional expression, and a mismatch between their relatively higher educational level and lower material lifestyle. For young men, higher BP levels may be attributed to expected donations of earnings to the extended family that exceed their own material lifestyle, in combination with more frequent Samoan-specific feelings of anger (Bitton et al, 2006).

CANCER

While very limited information exists on cancer among Samoans, data based on the examination of incidence records from cancer registries has provided a baseline.

Cancer is the second leading cause of mortality among American Samoans (Ruidas et al., 2004). Among American Samoans living in Hawaii as well as those referred to Hawaii for diagnosis and treatment, the more commonly encountered cancers for men included cancer of the lung, prostate, stomach and liver, and leukemia. In American Samoan females, breast cancer was most frequent, followed by cancer of the corpus uteri, cervix uteri and thyroid, and leukemia.

Compared with other Polynesians (i.e., Western Samoans, and Hawaiians), American Samoan males have a relatively higher frequency of nasopharynx, lung, prostate, thyroid and liver cancers. Males were more likely to be diagnosed with cancer after metastasis (the spread of cancer to other parts of the body) had occurred (45% vs. 34%) (Mishra et al., 1996). Among American Samoans living in California, a relatively similar profile of cancer distribution was found (Mishra et al., 1996).

Cancer Screening

Several studies examining cancer beliefs and screening rates among American Samoan women have emerged in recent years. A cross-sectional study that measured population-based estimates of breast cancer screening utilization rates among Samoan women who resided in American Samoan, Hawaii, and Los Angeles reported that Samoan women have lower screening rates than the national Healthy People 2010 objectives and those reported for other minorities (Mishra et al., 2001). Results indicated that only 55.6% of women 30 years or older had ever had a clinical breast exam and 32.9% of women 40 years or older had ever had a mammogram. The screening rate for Samoans is much lower than the national objective for mammography screening within the preceding two years for women 40 years or older, which is 70% (Healthy People 2010).

A study of Samoan women in American Samoa, Hawaii, and Los Angeles revealed that only 46% of women reported having Pap smears within the past 3 years, with the likelihood that such a low screening rates contributes to the high site-specific incidence of cervical cancer among this population (Mishra et al., 2001). Further analysis indicated that knowledge and attitudes about cervical cancer were not significant predictors of Pap smear utilization due to cultural attitudes about cancer that have a greater influence over screening and treatment patterns for Samoans.

Beliefs about Cancer

In an effort to gain insight into American Samoans' beliefs about cancer, focus groups were conducted in American Samoa, Honolulu, and Los Angeles. Results indicated that American Samoans have limited understanding of cancer that may be contributed to lack of targeted educational programs. Researchers also noted that cancer was not part of the Samoan culture, as the word for cancer itself, *kanesa*, was adopted from the English word "cancer" to describe the illness. Further, participants reported that prevention was not part of their culture, including cancer-prevention services. These findings have helped to guide development of new cancer awareness materials and the design of future intervention programs for cancer control in this population. Recently, as part of the National Cancer Institute's Special Populations Networks, Pacific Islander Cancer Control Network (PICCN) emerged to provide an infrastructure to improve cancer awareness in a more

culturally sensitive manner for Samoans, Tongans, and Chamorros in the US.

An explorative, qualitative study with a convenience sample size of fifteen was conducted with Samoan women living in Hawaii to examine beliefs and attitudes towards early detection of breast cancer and utilization of mammography (Ishida et al., 2001). Early detection not being a priority and pain of mammography were reported to be major barriers while physician recommendation and prevention of cancer were major motivators in seeking such services. Interestingly, fear was reported both as a barrier and motivator in seeking screening. Researchers suggested that capitalizing on Samoan women's priorities of health, family, and education is an appropriate and timely strategy to promote understanding and early detection.

A large survey of Samoans from American Samoa, Hawaii, and Los Angeles documented cultural differences in the beliefs and understanding of cancer. For example, residents of American Samoa or Hawaii were more likely to say they did not want to know that they had cancer, that cancer is a punishment from God, and that cancer can be cured by traditional Samoan healers (Mishra et al., 2000).

INFECTIOUS DISEASES

HEPATITIS C

Limited information is known about Hepatitis C infection among Samoan Americans. An examination of specimens collected in 1985 and 2002 among the general populations of Samoa and American Samoa indicated a low prevalence of 0.2% among this population (Armstrong et al., 2006).

HIV/AIDS &SEXUALLY TRANSMITTED DISEASES

American Samoa currently does not have routine prenatal screening for sexually transmitted diseases (STD) or HIV for pregnant women (Sullivan et al., 2004). Lack of sustainable funding and adequate laboratory services are the biggest barriers to implementing such prenatal screening policies. In a study of 452 women attending two prenatal clinics in American Samoa, results indicated a high prevalence of STDs, as 42.8% of women had at least one STD and 11% had multiple infections, including 29.7% for Chlamydia, 20.8% for trichomoniasis, and 3.3% for gonorrhea (Sullivan et al., 2004). Among those with Chlamydia, women 30 years or younger were significantly more likely to have the infection than older women, while nearly all of the women (92.8%) who had gonorrhea were younger than 25 years of age.

MATERNAL AND CHILD HEALTH

Starting prenatal care as early as possible during a pregnancy is believed to promote healthier birth outcomes for both the mother and infant. Nearly 52% of Samoan mothers do not begin prenatal care in the first trimester, higher than any other racial or ethnic group (US DHHS, Office of Women's Health).

TOBACCO USE

Recent cross-sectional data revealed a high prevalence of smoking among the Samoan population, with about one-quarter of the population (26.6%) reported smoking, or 31.4% of men and 22.5% of women (Mishra et al., 2005). Men also reported significantly earlier smoking initiation and smoked more cigarettes than women. The findings also highlighted the need for disaggregating research and surveillance data for API sub-ethnic groups.

NUTRITION, WEIGHT AND PHYSICAL ACTIVITY

High rates of obesity among American Samoans have led to a number of comparative studies with Western Samoans and Samoans in Hawaii. Substantial dietary differences have been found between residents of American Samoa and those of the less modernized country of Western Samoa. American Samoans consumed significantly more energy as carbohydrate (47% vs 44%) and protein (18% vs 13%) and less as fat (36% vs 46%) and saturated fat (16% vs 30%). Intake of cholesterol and sodium were also higher among American Samoans. American Samoans of lower economic categories had lower intake of protein, cholesterol, and sodium, and higher intake of saturated fat (Galanis et al., 1999). American Samoan children are also significantly heavier and taller than their Western Samoan counterparts, with the main influence being modernization (Bindon et al., 1986).

A number of studies have examined the effects of modernization, migration and acculturation on the health of American Samoans. In a study of over 44,000 insured individuals to identify factors associated with obesity, Samoans had the highest rate of obesity. (Taira et al., 2004).

RESOURCES

The following agencies are able to provide additional information regarding the Samoan American community:

- Data and Statistics on Native Hawaiian / Other Pacific Islander Office of Minority Health, US DHHS

http://www.omhrc.gov/templates/browse.aspx?lvl=2&lvlID=71

- Pacific Islander Cancer Control Network (PICCN)
  http://uipi-piccn.org

- WINCART: Weaving an Islander Network for Cancer Awareness, Research and Training
  Ph: (714) 278-4592
  Contact: Sora P. Tanjasiri, DrPH, MPH
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- Samoan National Nurses Association
  http://www.snna.org/

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ABOUT THIS SERIES
This health brief is part of a series of that includes Cambodian, Chamorro, Chinese, Filipino, Hmong, Japanese, Korean, Native Hawaiian, Samoan, South Asian, and Vietnamese. All are available for download at www.apiahf.org.

Purpose
The purpose of the series is to summarize published research findings of disparities in the health and healthcare of the selected group. The data presented is meant for community health advocates, grant writers, evaluators and students as a tool to raise awareness, guide program development and spark future research for the well-being of Asian American and Pacific Islander populations.

Methods
This brief was updated after a PubMed literature review. In order to find the latest information, the Pubmed literature search focused on the years 2000-present and each ethnic group was cross referenced with these focus areas: access to quality health services, arthritis, osteoporosis, and chronic back conditions, cancer, chronic kidney disease, diabetes, disability and secondary conditions, education & community-based programs, environmental health, family planning, food safety, health communication, heart disease and stroke, HIV, immunization, infectious disease, injury & violence prevention, maternal, infant & child health, medical product safety, mental health & mental disorder, nutrition & overweight, occupational safety & health, oral health, physical activity & fitness, public health infrastructure, respiratory disease, sexually transmitted disease, substance abuse, tobacco use, and miscellaneous topics. For the Samoan health brief, the search cross-referenced the terms Samoa and Samoan with the aforementioned areas.

Limitations
It is difficult to characterize the health status of specific Asian American or Pacific Islander ethnic populations. Many studies do not differentiate between the various ethnicities studied. Small sample sizes make it difficult to generalize research findings and in some cases, data are just not available. For these reasons, the data contained here provide only a rough estimate of health status and are not an exhaustive presentation of the findings, nor are they meant for medical decision-making.

Contributors
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