The Impact of Heart Disease on Asian Americans and Pacific Islanders

Background Reports

From “Addressing Cardiovascular Health in Asian Americans and Pacific Islanders: A Background Report”

NIH Publication No. 00-3647

“Asian American and Pacific Islander Workshops Summary Report on Cardiovascular Health”

NIH Publication No. 00-3793

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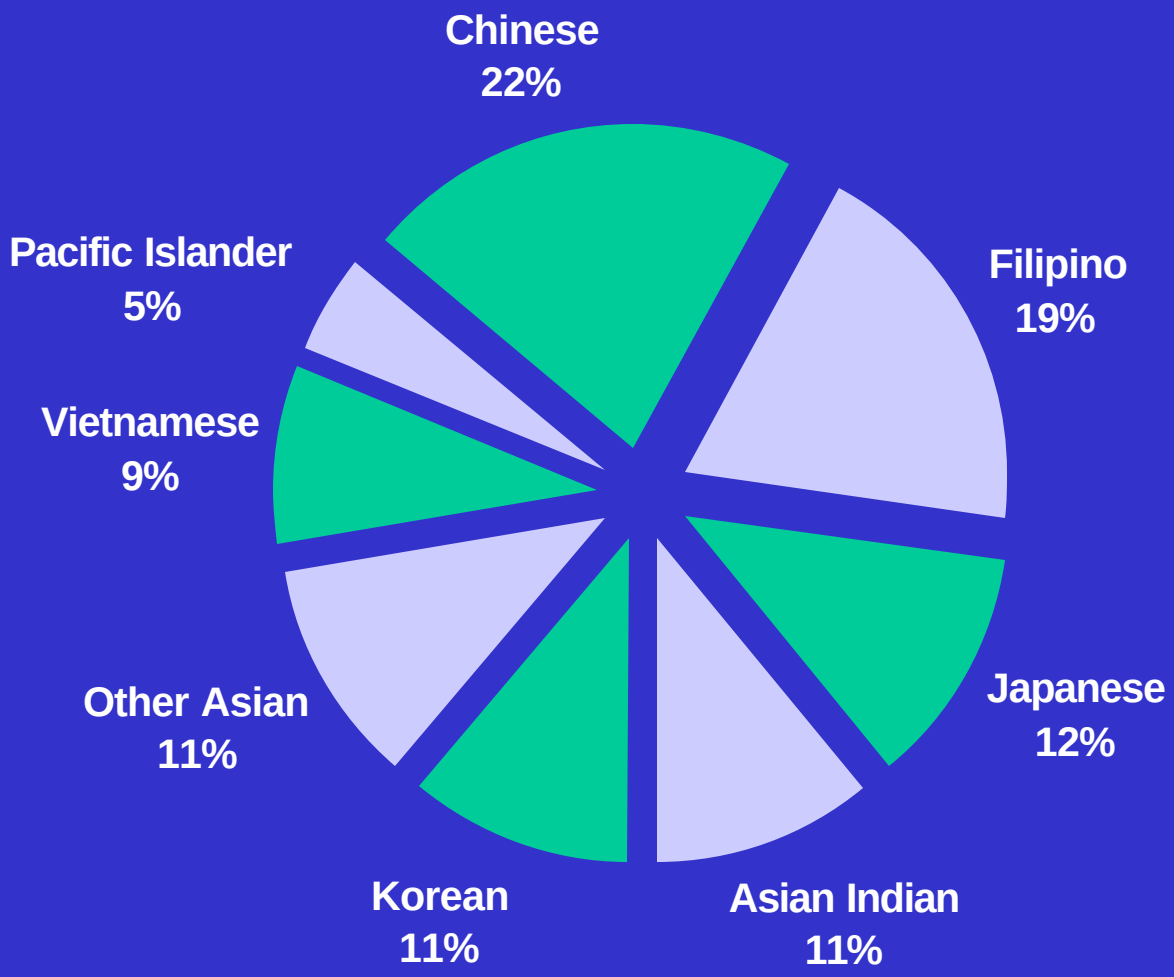
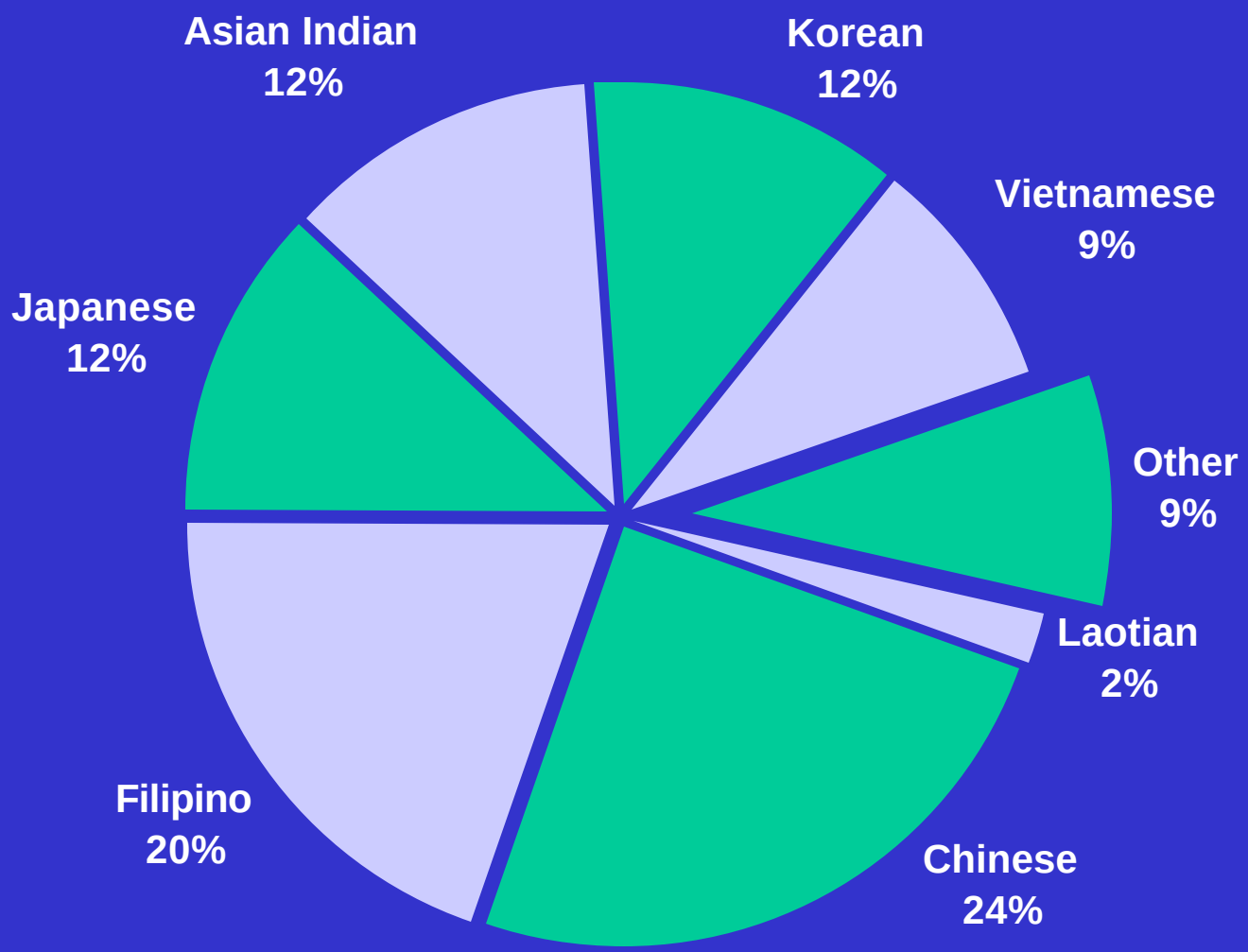
Ethnic Distribution of the Asian American and Pacific Islander Population, United States, 1990



Source: U.S. Bureau of Census, 1992.

Asian American Population for Selected Groups, 1990 (excludes Pacific Islanders)

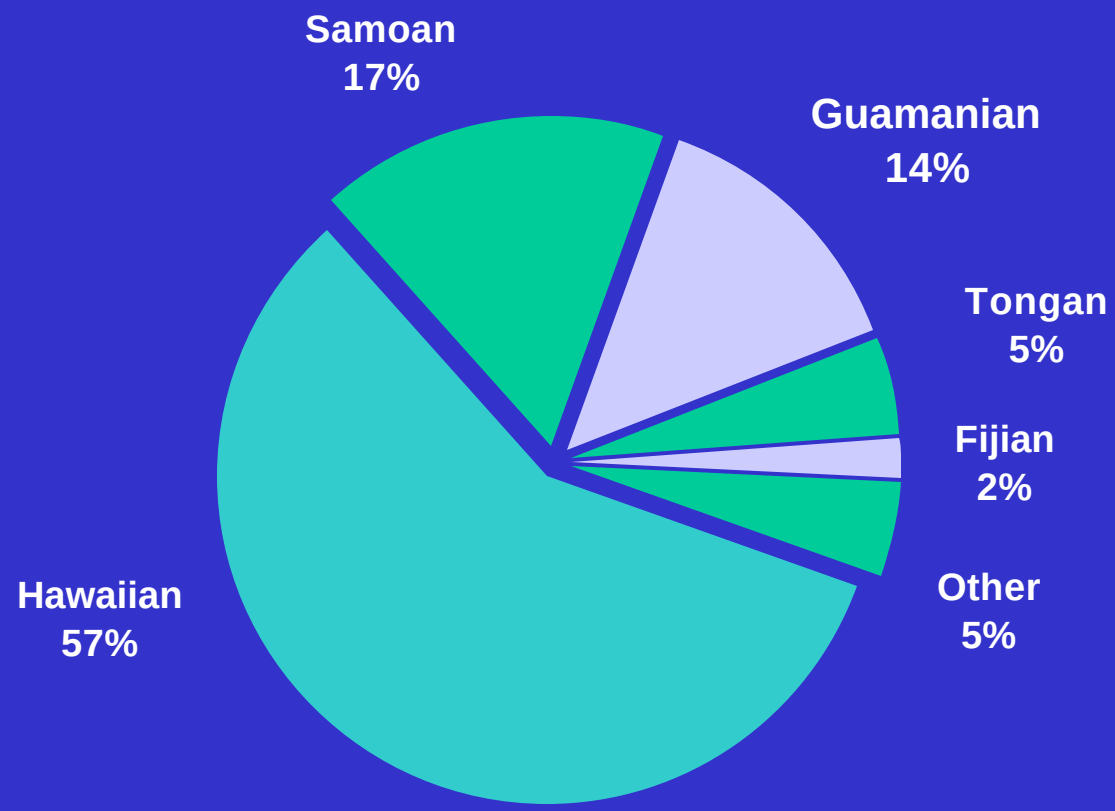


OTHER 9%:

- Cambodian 2%
- Thai 1%
- Hmong 1%
- Other Asian 4%

Source: U.S. Bureau of Census, We the Americans: Asians, 1993.

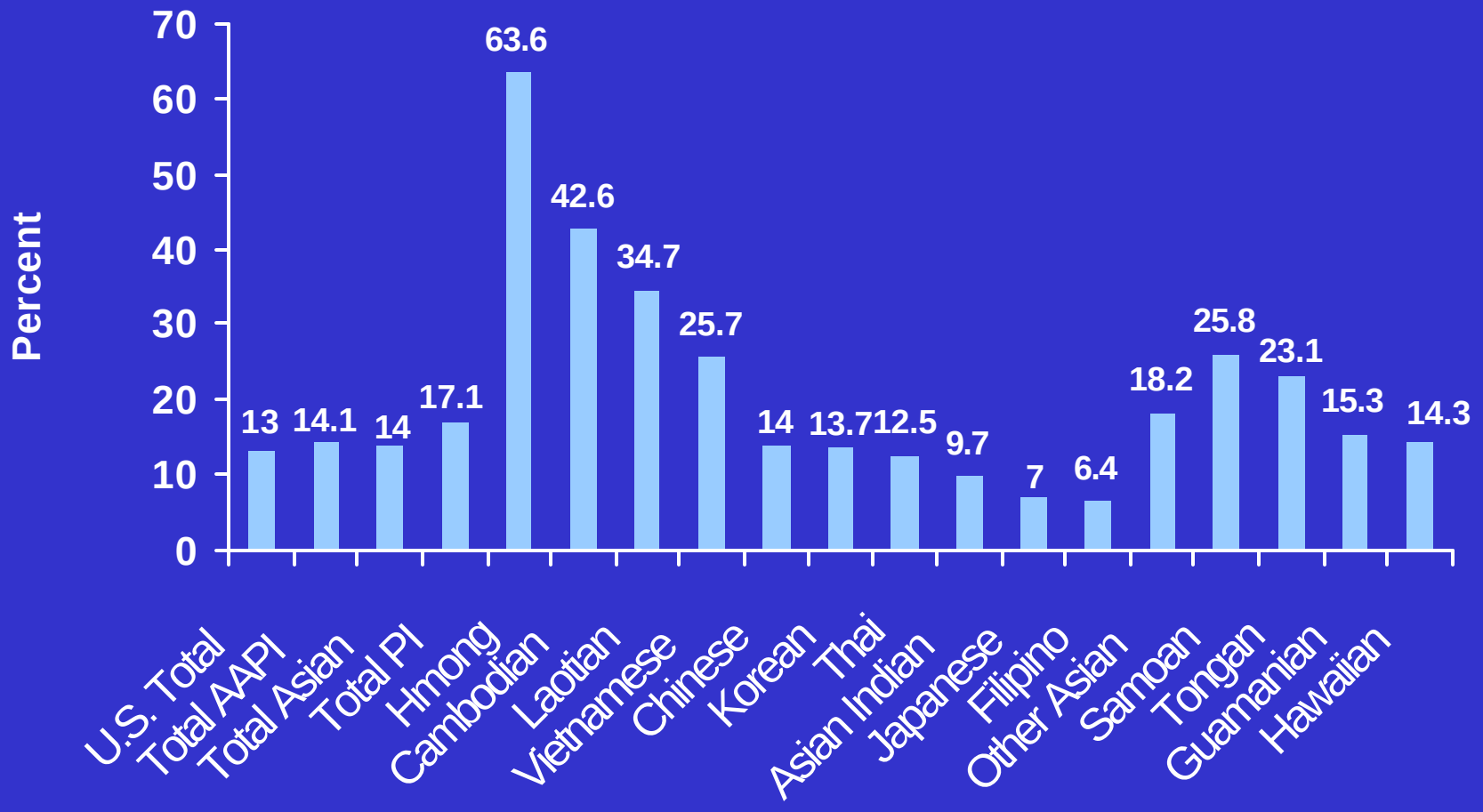
Pacific Islander Population, 1990 (Excludes Asian Americans)



Source: U.S. Bureau of Census, 1993.

Breaking the "Model Minority Myth"

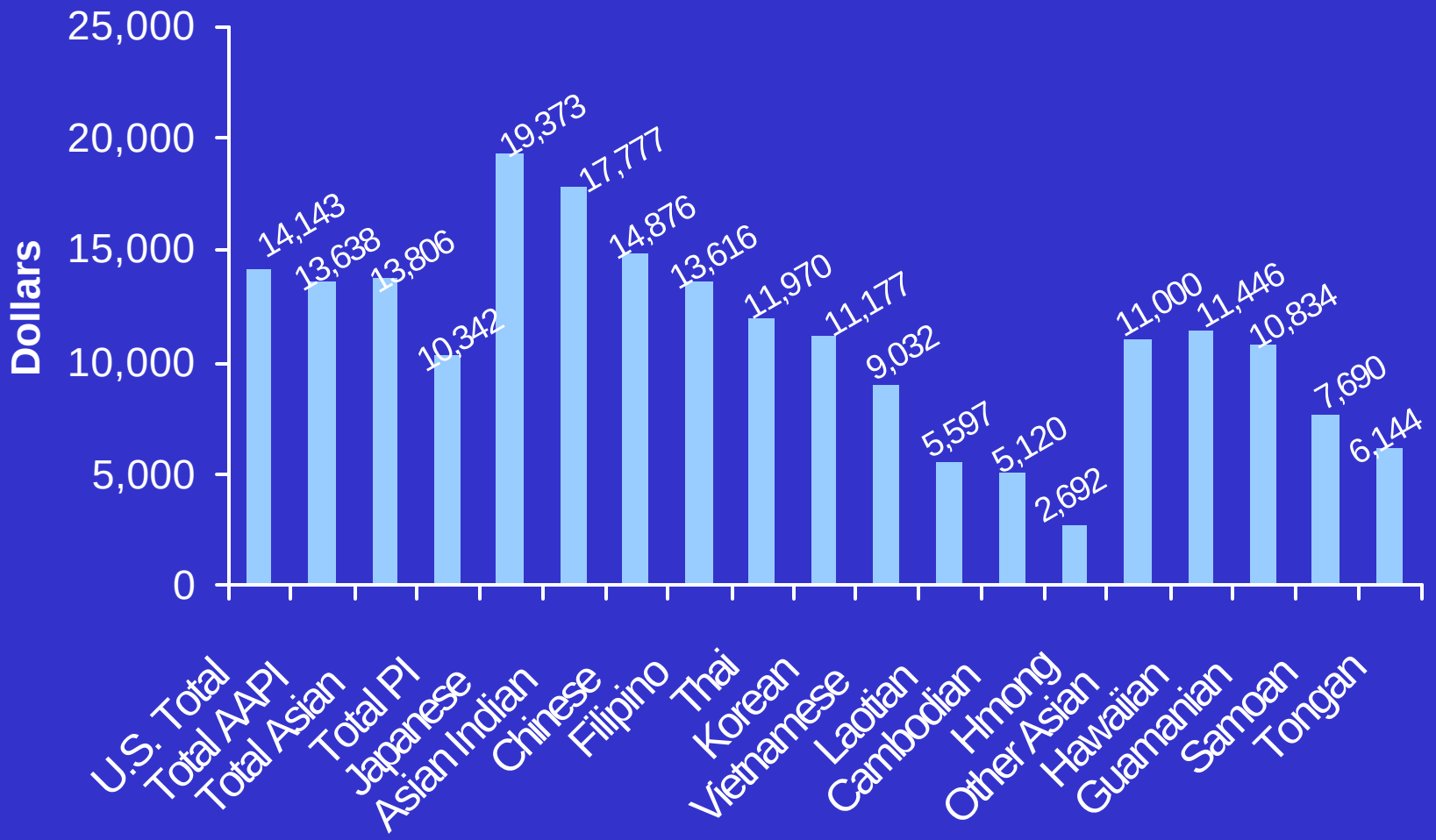
Asian American and Pacific Islander Poverty Rates, 1990



Source: U.S. Census, 1992

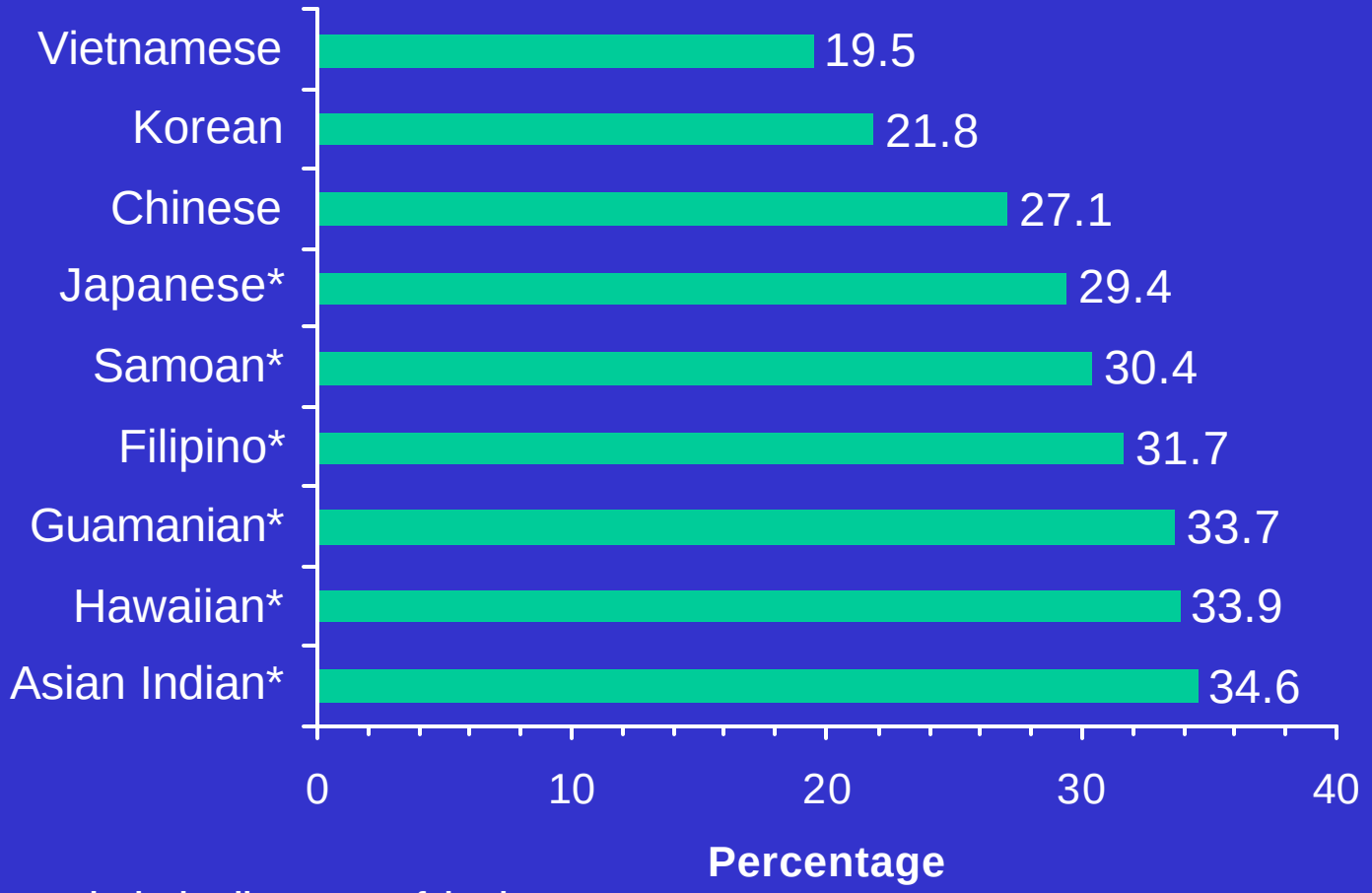
Breaking the "Model Minority Myth"

Asian American and Pacific Islander Per Capita Income, 1990



Source: U.S. Census, 1992.

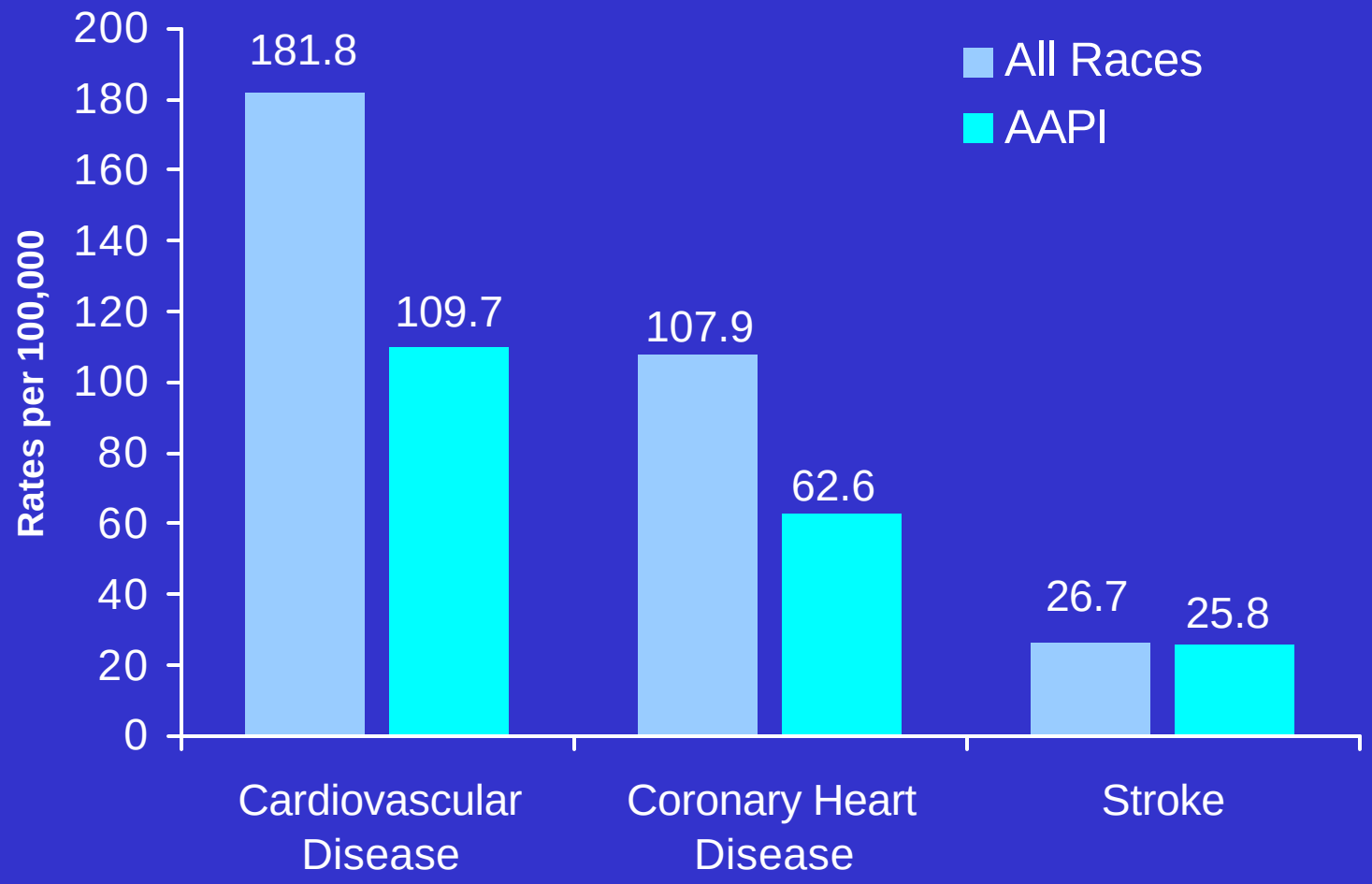
Heart Disease as Percentage of All Deaths



***Heart disease is the leading cause of death**

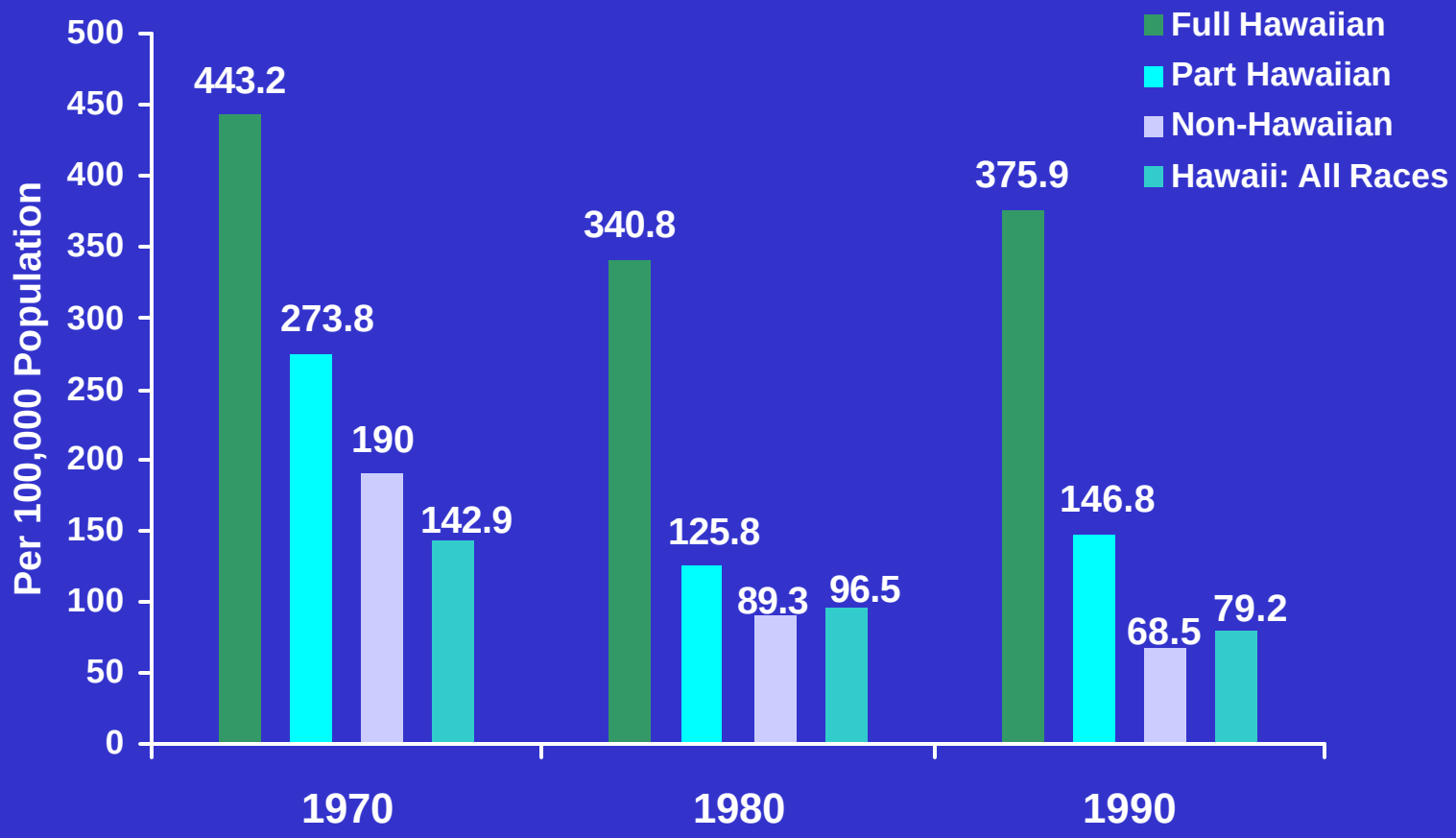
Source: National Vital Statistics System, CDC, NCHS, 1994.

Selected 1995 Age-Adjusted Death Rates



Source: Anderson, 1998.

Age-Adjusted Heart Disease Death Rates for Hawaiians



Source: Look MA & Braun KL, 1995.

AAPI CV Health Status: Risk Factors

High Blood Pressure

- Low levels of awareness and control
- Very little awareness among Cambodian, Laotian, and Vietnamese immigrants
- Significantly higher levels among Filipino Americans
- Significantly lower blood pressure screening rates among AAPIs

AAPI CV Health Status: Risk Factors

High Blood Cholesterol

- Low blood cholesterol screening rates
- Highest in Japanese men and women vs. other AAPI ethnic groups
- Cholesterol levels are lower in Asian countries than in Western countries

AAPI CV Health Status: Risk Factors

Cigarette Smoking

- Highest rates among Southeast Asians
- Southeast Asian males start smoking early in life
- High tobacco use among Korean men in California

AAPI CV Health Status: Risk Factors

Obesity

- Overweight and obesity are prevalent among Pacific Islanders
- Native Hawaiians and Samoans are among the most obese people in the world
- Molokai Heart Study (Native Hawaiians): 64% were obese

AAPI CV Health Status: Risk Factors

Obesity (cont.)

- BMI levels for selected Samoan population subgroups*

	Men (BMI)	Women (BMI)
Western Samoan	26	28
Hawaii	31	33
California	35	34
American Samoa	30	33

* NOTE: BMI $\geq$ 30 is obese; BMI of 25-29 is overweight

AAPI CV Health Status: Risk Factors

Physical Inactivity

- AAPIs engage in less physical activity compared to the general population
- Korean Americans in California are less likely to exercise than the general Californian population

AAPI CV Health Status: Risk Factors

Diabetes

- Highly prevalent among Pacific Islanders
- Higher risk for Native Hawaiians vs. other Hawaiian groups
- Guam's death rate is 5 times higher than U.S. mainland
- One of the leading causes of death in American Samoa

Diet-Related Characteristics

- Migration patterns affect diet
- Eating habits change among Korean students
- Filipinos: food high in salt increased risk for hypertension

Diet-Related Characteristics (cont.)

- Some groups maintain strong ties to traditional diet
- Micronesia: deaths due to CVD and diabetes have been attributed to poor diet

Designing Culturally Appropriate Community-Based Programs

Strategies

- Establish trust with the community
- Integrate a health topic within a comfortable setting
- Address the community's priority issues first
- Recognize cultural factors may affect improved health outcomes

Designing Culturally Appropriate Community-Based Programs

Strategies

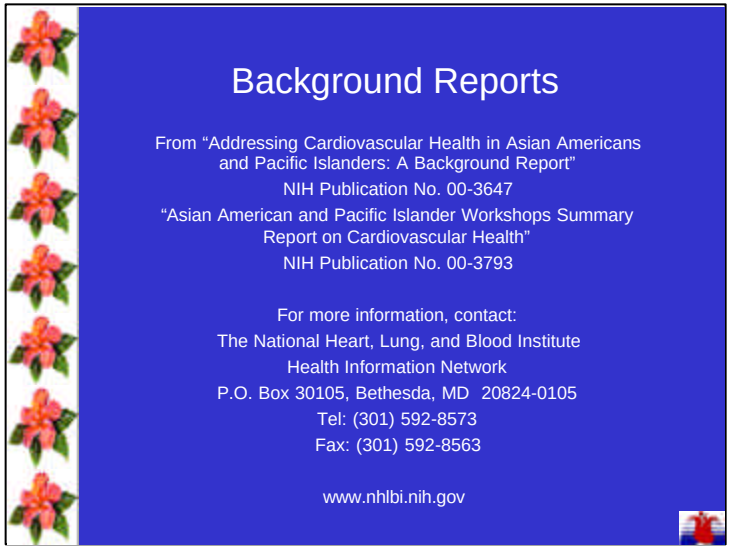
- Use compelling and accurate data
- Develop a cadre of knowledgeable lay counselors
- Establish alliances and coalitions
- Provide culturally sensitive and linguistically appropriate materials

Designing Culturally Appropriate Community-Based Programs

Strategies

- Use cultural themes and symbols
- Determine the role of public policy
- Be prepared to respond to changing needs of the population (e.g., use consumer feedback)

These slides were developed by the National Heart, Lung, and Blood Institute (NHLBI) to inform health professionals, students, and community members about the impact of heart disease on Asian Americans and Pacific Islanders (AAPIs). Health planners, administrators, students, and public health officials will find these materials useful as they provide comprehensive information on AAPI sociodemographic profiles, health beliefs and perceptions, examples of successful community-based programs for AAPIs, and important community recommendations on how to bring heart health to AAPIs. These slides may also be used as teaching tools. The information presented here is found in two background reports developed by the NHLBI.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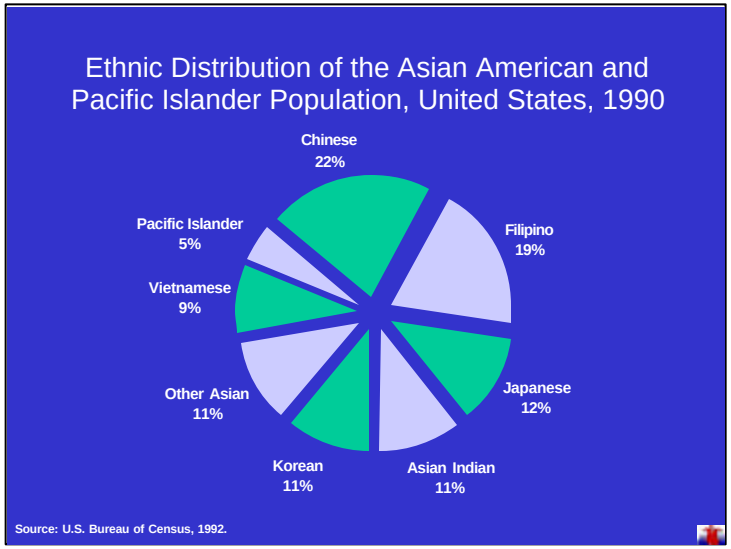
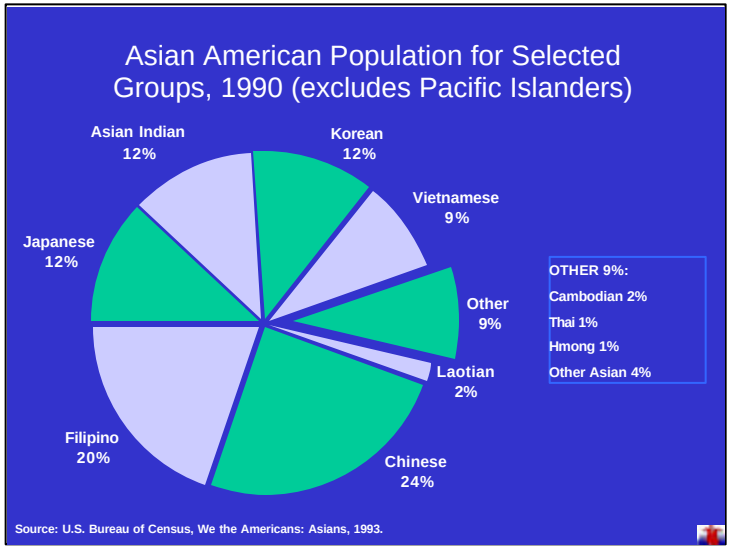
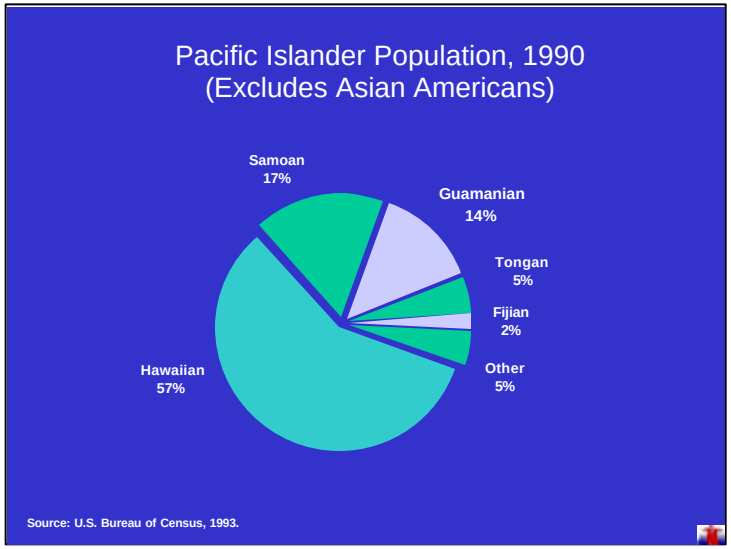


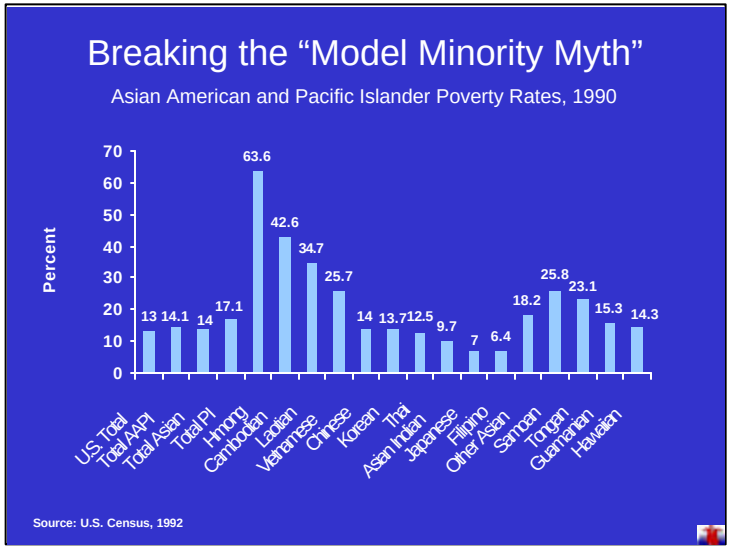
AAPIs represent diverse communities with unique histories, cultures, languages, traditional beliefs, and values. AAPIs are the fastest growing minority group in the United States. AAPIs numbered 10.4 million in 1998 or approximately 3.9 percent of the U.S. population. The Census Bureau projects that AAPIs will reach 34.4 million by the year 2050, representing 10 percent of all Americans.



According to the U.S. Census, the “Asian and Pacific Islander” racial category consists of 50 ethnic subgroups. Some of the ethnic subgroups included in the category Asian includes: Afghani, Asian Indian, Bangladeshi, Burmese, Cambodian, Chinese, Filipino, Hmong, Indonesian, Iwo-Jiman, Japanese, Korean, Laotian, Malaysian, Mien, Nepali, Okinawan, Pakistani, Sikkim, Sri Lankan, Thai, and Vietnamese.

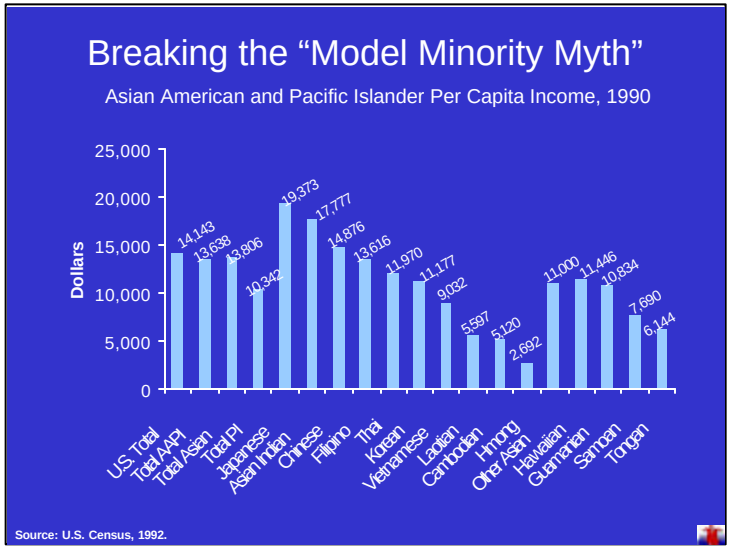


The Pacific Islander community is diverse and heterogeneous as well. Some of the ethnic subgroups included in the Pacific Islander category are: Chamorro (Guam), Chuukese, Fijian, Hawaiian, Kosraean, (Federated States of Micronesia), Mariana Islanders (Commonwealth of Northern Mariana Islands), Melanesian, Palauan (Republic of Palau), Papese, Pohnpein, Samoan (American and Western Samoa), and Tongan.

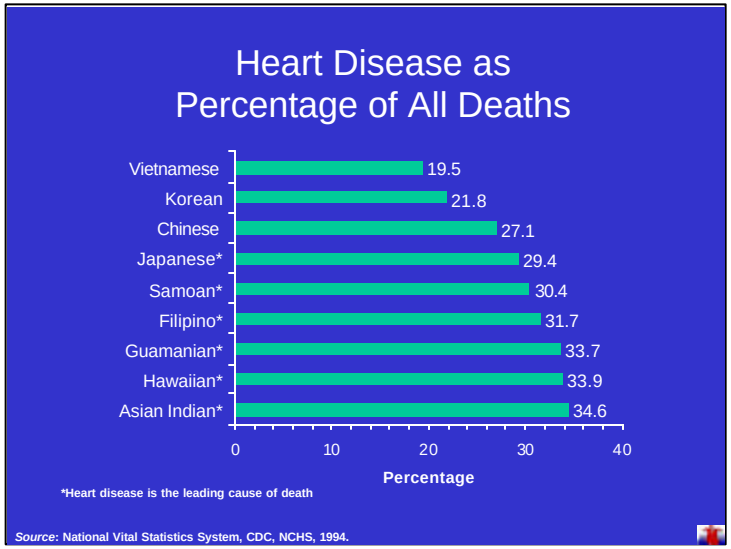


For years, AAPIs have been portrayed by the mainstream media as the "model minority": they are self-sufficient, well-educated, hardworking, and upwardly mobile. While the number of AAPIs living in the U.S. has increased at a rate of 4.5 percent per year since 1990, they are one of the most poorly understood, invisible, and neglected minority groups. A closer look at socioeconomic indicators tells a different story.

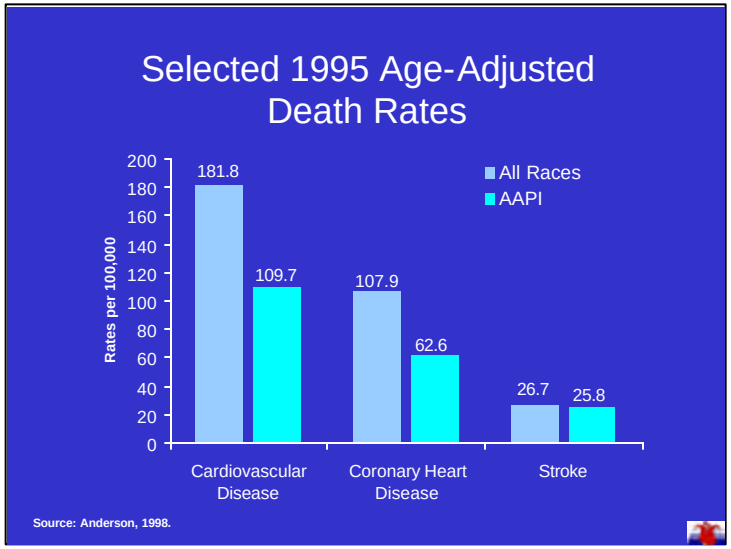
This slide shows that AAPIs are not immune from poverty. Some communities such as the Hmong, Laotian, Vietnamese, and Cambodian, Samoan and Tongan experience poverty at a much higher rate than the total U.S. population.



This slide that also shows that **not** all AAPIs are "well-off." AAPIs tend to display higher income levels compared to other groups in the U.S. because they tend to have more workers per household. Twenty percent of AAPI families had three or more workers compared to 13 percent of total U.S. families.



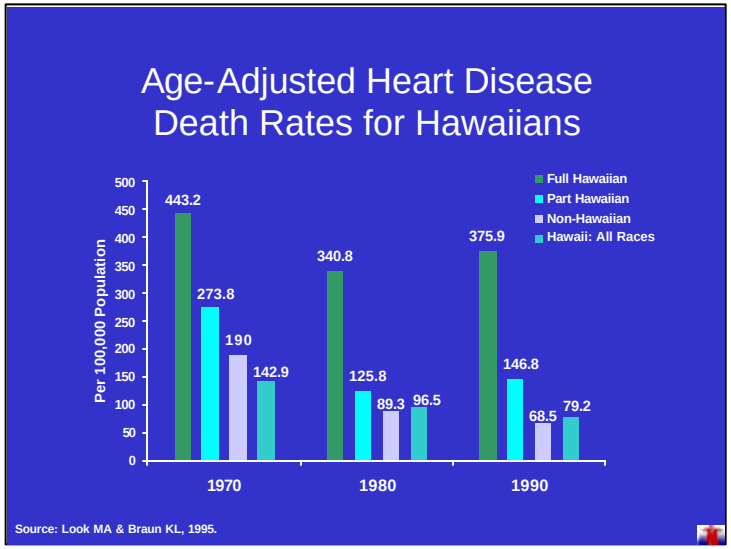
Heart disease and cancer are either the leading or second leading cause of death for each of the AAPI subgroups. For Asian Indians, Hawaiians, Guamanians, Filipinos, and Japanese heart disease is the leading cause of all deaths. Stroke is the third leading cause death for Chinese, Japanese, Hawaiians, and Filipinos. Between 1990-1995, stroke was the leading cause of death for Filipino females in San Francisco.



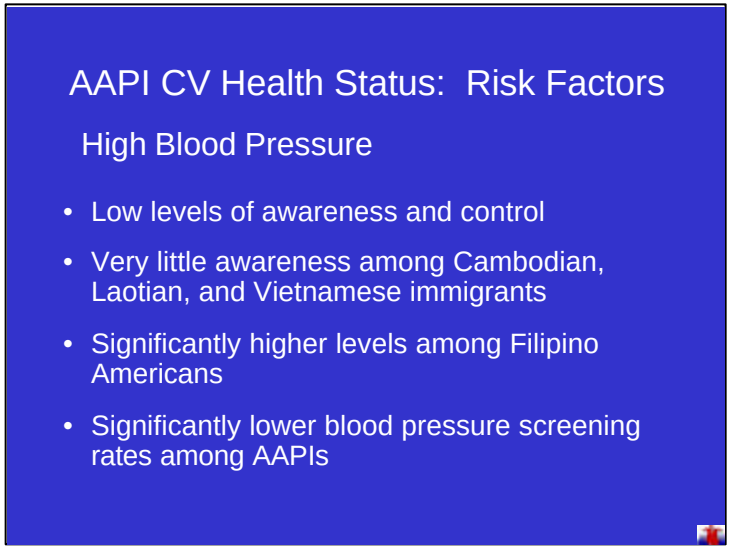
The age-adjusted cardiovascular disease (CVD) death rate for AAPIs is 109.7 per 100,000 compared to 181.8 for the total U.S. population.

The age-adjusted death rate due to coronary heart disease (CHD) for AAPIs is 62.6 per 100,000 compared to 107.9 per 100,000 for all races combined.

Death rates due to stroke for AAPIs is 25.8 per 100,000 compared to 26.7 per 100,000 for the general population.



Native Hawaiians disproportionately suffer from heart disease compared to other ethnic groups in the State of Hawaii. The death rate for Hawaiians (full and part) for heart disease is 66 percent higher than for the total state population. Among Full Hawaiians, the mortality rates for heart disease are the highest-271 percent higher than part-Hawaiians and 382 percent than non-Hawaiians.

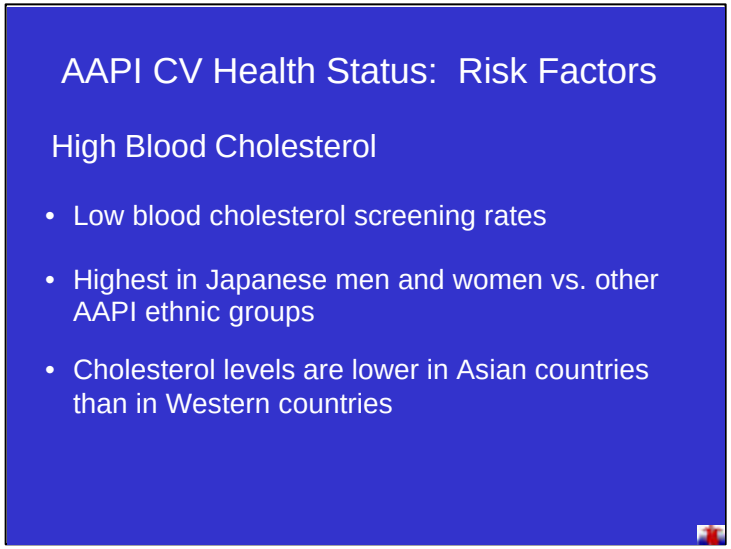


Compared to most Americans, AAPIs are less likely to be aware of hypertension or to be undergoing treatment (Chen et al., 1991).

In a study of Cambodian, Laotian, and Vietnamese immigrants, 94 percent had no knowledge of what blood pressure is and 85 percent did not know how to prevent heart disease (Chen et al., 1991).

As a group, Filipino Americans have higher levels of hypertension compared with other AAPIs, closer to that of African Americans (NHLBI, 1993; Stavig, Igra, Leonard, 1988).

In 1995, 15.7 percent of Asian Americans in Massachusetts reported to have never checked their blood pressure, compared to 5.5 percent of the total State population (MA Dept. of Public Health, 1996).

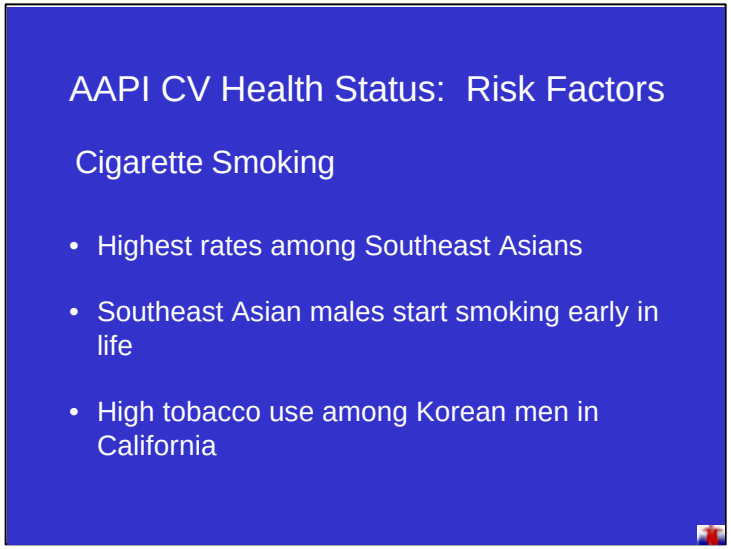


The limited number of AAPIs who have their blood cholesterol checked indicates a gap in knowledge and access to information. More importantly, it indicates a significant number of AAPIs who are unaware of their risk for heart disease.

In 1993, only 44 percent of AAPIs had their blood cholesterol levels checked within the past 2 years compared to 54 percent of the total population (NCHS, 1993).

There are very few studies on the blood cholesterol levels of AAPIs. One California study found that cholesterol levels were highest among Japanese men and women compared with other AAPI ethnic groups (Klatsky and Armstrong, 1991).

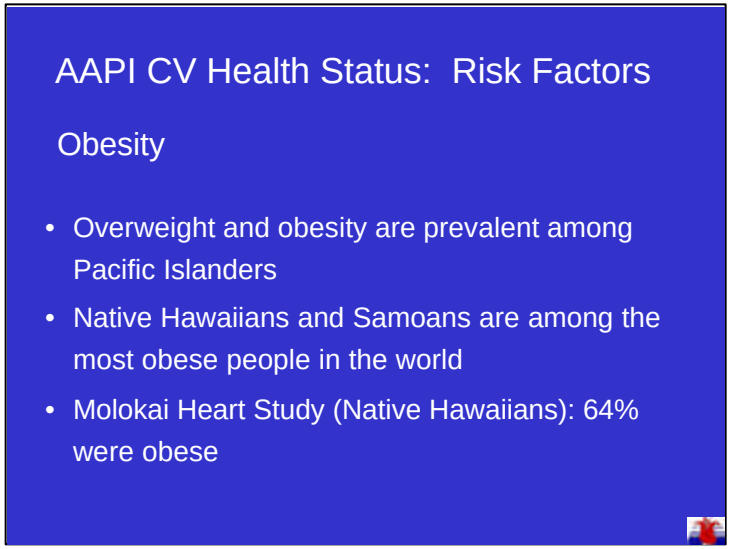
Several studies show that cholesterol levels are are lower in Asian countries than in Western countries (Bates et al., 1989; Kesteloot et al., 1985; Yao et al., 1988).



Although rates for smoking in the United States are reported to be lowest among AAPIs (18.2 percent), ethnic-specific data show that that 92 percent of Laotians, 71 percent of Cambodians, and 65 percent of Vietnamese smoke (CDC, 1998).

One study found that Southeast Asian males start smoking early in life. Eighty-two percent of Laotian males began smoking before the age of 20, and 55 percent of those began before the age of 15 (Levin, 1987).

A survey of Koreans in California found that tobacco use among Korean men is higher than the state population: 39 percent vs. 19 percent (Wismer et al., 1994).



Overweight and obesity is a major risk factor among Pacific Islanders. For example, Native Hawaiians and Samoans are among the most obese people in the world (Crews, 1988).

Sixty-four percent of Native Hawaiians who participated in the Molokai Heart study were obese (Aluli, 1991).

AAPI CV Health Status: Risk Factors

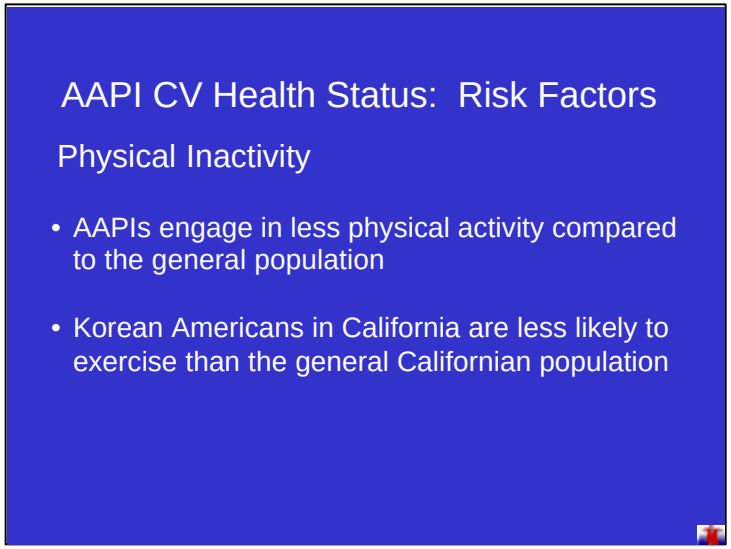
Obesity (cont.)

- BMI levels for selected Samoan population subgroups*

	Men (BMI)	Women (BMI)
Western Samoan	26	28
Hawaii	31	33
California	35	34
American Samoa	30	33

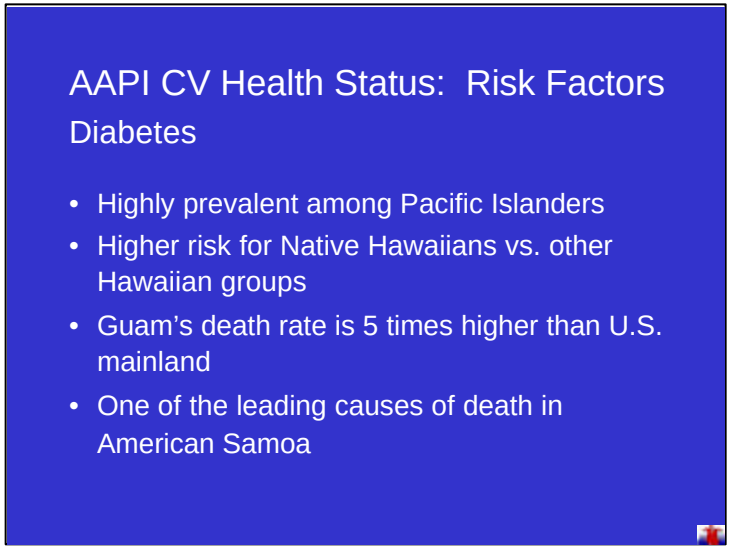
* NOTE: BMI ≥ 30 is obese; BMI of 25-29 is overweight

Samoans age 20 and above, regardless of where they live, show higher levels of obesity as measured by BMI (Pawson, 1986).



Sedentary lifestyle is common among AAPIs, and as a group they engage in less physical activity than the general population. One study showed that 40 percent of Vietnamese males and 50 percent of Vietnamese females do not exercise. This compares with 24 percent of men and 28 percent of women in the U.S. population. This study defined "no exercise" as no leisure time physical activity (CDC, 1992).

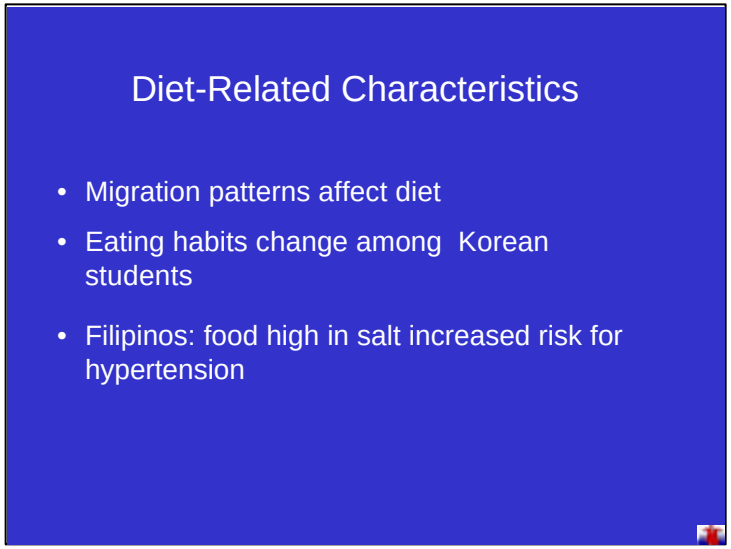
Korean Americans are less likely to exercise at least once in the past month than general Californian population (69 percent vs. 79 percent). This study defined "exercise" as moderate physical activity (30 minutes a day, 3 days a week) (Wismer, 1994).



Diabetes is major cardiovascular risk factor among Pacific Islanders. For example, Native Hawaiians are twice as likely to be diagnosed with diabetes than white residents of Hawaii (Hawaii Diabetes Control Program. Based on Wen M, unpublished analysis of data from the Behavioral Risk Factor Surveillance System (BRFSS) from 1988 to 1995.).

Guam's death rate due to diabetes is nearly five times higher than that of the U.S. mainland (Dept. of Public Health and Social Services, 1997).

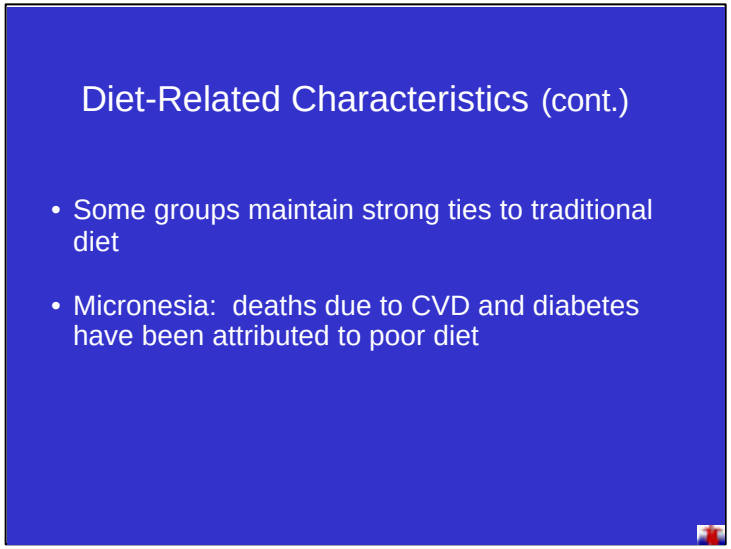
Diabetes is one of the top 10 causes of death in American Samoa and is found in 40% of adults over the age of 50 (Diaz, 1997).



For AAPI immigrants, adaptation to Western lifestyle is often manifested by increased intake of fatty and high-calorie food. The classical migration study, Ni-Hon-San Study looked at migration from Japan to Honolulu to San Francisco. It showed that intake of saturated fat and cholesterol increased with migration and westernization and were associated with higher CHD mortality rates (Kagan, Harris, Winkelstein, et al., 1974).

Another study found that Korean students showed a decrease in their consumption of rice while showing a marked increase intakes of fatty cuts of beef, pork, fried poultry, and regular dairy products (Pan et al., 1999).

Among Filipinos, frequent consumption of meat, salted eggs, and sauces high in salt increased their risk for hypertension (Picache, 1992).



However, some AAPIs continue eating traditional diet despite adaptation to a more Western diet. For example, Southeast Asians tend to maintain strong ties to their traditional diets and native foods in spite of dramatic changes in their food buying practices (Story and Harris, 1989).

While information on the eating habits of Pacific Islanders is limited, some information reveal eating patterns that warrant immediate attention from the public health community. For example, in Micronesia deaths due to CVD and diabetes have been attributed to heavy consumption of fatty food such as canned and other imported meat (corned beef and turkey tails), shortening, salt from canned fish and vegetables, soy sauce, and instant noodles (Jackson, 1997).

Establish trust with the community. Establishing trust with the community is key to successful implementation of any health promotion program, especially for AAPIs who often seek health advice from a religious or community leader first (i.e., Hmong clan leaders).

Integrate a health topic within a comfortable and accessible social setting. Persistent barriers continue to prevent AAPI communities in accessing health services consistently: financial, cultural (e.g., language, fear, denial of health problems), and logistical (e.g., transportation, childcare).

Address priority issues of concern to the community first (e.g., stress, unemployment, immigration status) and then introduce cardiovascular disease prevention activities for improved health.

Recognize and understand that there are myriad of cultural factors that may prevent AAPI communities from securing improved health outcomes (e.g., refugee immigrants might fear authority figures, certain ethnic groups may have differing cultural beliefs about preventive health services).

Here are a few suggested strategies that are aimed at planning, developing and implementing successful community-based programs for AAPIs.

Use compelling and accurate data to identify where gaps exist. Organizations targeting AAPIs must be able to access sources of data, interpret them in useful terms, and identify areas where gaps exist. For instance, information on local demographics may help identify high-risk groups.

Develop a cadre of knowledgeable lay counselors. Community members are most qualified to promote heart health. They are aware of the needs and strengths of the community.

Establish alliances and coalitions. Collaborations strengthen and sustain health promotion at the community level. Coalitions work best when there is equal representation of community members.

Provide culturally sensitive and linguistically appropriate materials. Materials should be more than just literal translations of English brochures to other languages. Messages must take into consideration cultural value systems, cognitive abilities, and environmental factors surrounding the individual.

Use cultural themes and symbols that evoke affinity. Cultural imagery highlights family cohesiveness and harmony which are dominant values in the AAPI communities. Communicate creatively with picture stories, storytelling, and folklores.

Determine the role of public policy in eliminating health disparities. Formulating strategies with a policy framework allows the advocate to identify ways local, state, and federal governments can be held accountable for eliminating health disparities.

Be prepared to respond to changing needs of the population (e.g., use consumer feedback). Gather feedback from the community to enhance programmatic elements and meet the dynamic needs of the community.