Factors Affecting Health of Women of Color

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Ethnic and Racial Heritage

Of the nearly 309 million people living in the United States (according to the U.S. census conducted on April 1, 2010), more than half (157 million or 50.8 percent) were women. More than 56 million—more than a third (36.1 percent)—were women of color. These 56.7 million women of color were distributed as follows: 44 percent Hispanic, 35 percent black (non-Hispanic), nearly 14 percent Asian (non-Hispanic), 2.0 percent American Indian and Alaska Native (non-Hispanic), and 0.4 percent Native Hawaiian and Other Pacific Islander (non-Hispanic). An additional 5 percent of women of color identified themselves as belonging to two or more races. In raw numbers, there are nearly 25 million Hispanic women, nearly 20 million black (non-Hispanic) women, more than 7 million Asian (non-Hispanic) women, more than 1 million American Indian and Alaska Native (non-Hispanic) women, and more than 246,000 Native Hawaiian and Other Pacific Islander (non-Hispanic) women.[1]

The 2010 population reflects an increase of 27 million over the 281 million people enumerated in the 2000 census. Although women of all races and ethnicities constituted equal proportions of the U.S. population in 2010 (50.8 percent) and in 2000 (50.9 percent), the more than 43 million women of color in 2000 were a smaller share of all women (slightly more than 30 percent) than they were in 2010 (36.1 percent). In 2000, there were more than 18 million black (non-Hispanic) women, more than 17 million Latina women, more than 5.3 million Asian (non-Hispanic) women, more than 1 million American Indian and Alaska Native (non-Hispanic) women, and more than 181,000 Native Hawaiian and Other Pacific Islander (non-Hispanic) women.[2]

Another difference between the populations in 2000 and 2010 was in the proportions of black (non-Hispanic) women (41 percent in 2000) and Hispanic women (39 percent in 2000) among all women of color. Between 2000 and 2010, Hispanic women increased to 44 percent of all women of color, while black non-Hispanic women decreased to 35 percent.

According to projections by the U.S. Census Bureau, the U.S. population will become more racially and ethnically diverse by the middle of the 21st century. In 2043, the United States is projected to become a majority-minority nation for the first time. While the white non-Hispanic population will remain the largest single group, no group will make up a majority. The white non-Hispanic population is projected to peak in 2024, at nearly 200 million, and then slowly decrease to 186 million in 2050, when they will account for 46.6 percent of the total population.[3]

Meanwhile, people of color are expected to total more than 213 million in 2050, when they will account for 53.4 percent of the total population. Between 2010 and 2050, the Hispanic population is projected to more than double to nearly 112 million, accounting for 28 percent of the 2050 population. The black non-Hispanic population is projected to rise to nearly 52 million over the same period, increasing its share of the total population slightly to 13 percent. The Asian non-Hispanic population is projected to more than double to almost 30 million in 2050, with its share of the nation's total population climbing to 7.4 percent. The American Indian and Alaska Native non-Hispanic population would increase to 2.9 million, but its share of the total population would remain at 0.7 percent. The population of Native Hawaiians and Other Pacific Islanders (non-Hispanic) would increase to 871,000 and remain 0.2 percent of the total population. The number of people who identified themselves as being of two or more races and non-Hispanic is expected to triple, and its population of more than 16 million would rise to 4.1 percent of the U.S. total.

Women of color are projected to increase in number from 57 million in 2010 to 107 million in 2050. Their share of the total female population

Table 1
Population by Race and Hispanic Origin for the United States, April 1, 2010

Race	Race Alone	Percentage of Total Population	Race Alone or in Combination*	Percentage of Total Population*
Total Population	308,745,538	100.0	308,745,538	100.0
American Indian and Alaska Native	3,739,506	1.2	6,138,482	2.0
Asian	15,159,516	4.9	17,676,507	5.7
Black or African American	40,250,635	13.0	43,213,173	14.0
Native Hawaiian and Other Pacific Islander	674,625	0.2	1,332,494	0.4
White	241,937,061	78.4	248,067,530	80.3
Two or more races	6,984,195	2.3	**	**
Hispanic or Latino and Race	**Race Alone**	**Percentage of Total Population**	**Race Alone or in Combination***	**Percentage of Total Population***
Total Population	308,745,538	100.0	308,745,538	100.0
Hispanic or Latino (of any race)	50,477,594	16.3	50,477,594	16.3
Not Hispanic or Latino	258,267,944	83.7	258,267,944	83.7
American Indian and Alaska Native	2,263,258	0.7	4,041,624	1.3
Asian	14,661,516	4.7	16,795,038	5.4
Black or African American	37,922,522	12.3	40,282,810	13.0
Native Hawaiian and Other Pacific Islander	497,216	0.2	1,020,354	0.3
White	197,318,956	63.9	202,229,636	65.5
Two or more races	5,604,476	1.8	**	**

*"In combination" means in combination with one or more other races. The sum of the five race groups adds to more than the total population because individuals may report more than one race.

**The population reporting two or more races is reflected within each of the designated racial/ethnic categories above.

Source: U.S. Department of Commerce, Bureau of the Census, Population Division. (2011). Table 3. Annual estimates of the resident population by sex, race, and Hispanic origin for the United States: April 1, 2010 to July 1, 2011 (NC-EST2011-03). Retrieved from http://www.census.gov/popest/data/national/asrh/2011/index.html

would increase from 36 percent to 53 percent over the same period of time. Among the 107 million women of color, more than half (51 percent) would be Hispanic, 25 percent black non-Hispanic, 15 percent Asian non-Hispanic, 8 percent women of two or more races non-Hispanic, 1.4 percent American Indian and Alaska Native non-Hispanic, and 0.4 percent Native Hawaiian and Other Pacific Islander non-Hispanic.[4]

Whenever possible, the population labels and presentation of data in this volume conform to the 1997 revisions to Statistical Policy Directive No. 15,

Table 2
Female Population by Race and Hispanic Origin for the United States, April 1, 2010

Race	Race Alone	Percentage of Total Population	Race Alone or in Combination*	Percentage of Total Population*
Female Population	156,964,212	100.0	156,964,212	100.0
American Indian and Alaska Native	1,849,811	1.2	3,083,750	2.0
Asian	7,941,039	5.1	9,208,460	5.9
Black or African American	21,045,595	13.4	22,580,483	14.4
Native Hawaiian and Other Pacific Islander	331,721	0.2	664,743	0.4
White	122,238,141	77.9	125,351,477	79.9
Two or more races	3,557,905	2.3	**	**
Hispanic or Latino and Race	**Race Alone**	**Percentage of Total Population**	**Race Alone or in Combination***	**Percentage of Total Population***
Female Population	156,964,212	100.0	156,964,212	100.0
Hispanic or Latino (of any race)	24,858,794	15.8	24,858,794	15.8
Not Hispanic or Latino	132,105,418	84.2	132,105,418	84.2
American Indian and Alaska Native	1,147,502	0.7	2,072,064	1.3
Asian	7,691,693	4.9	8,766,145	5.6
Black or African American	19,853,611	12.6	21,080,725	13.4
Native Hawaiian and Other Pacific Islander	246,518	0.2	512,076	0.3
White	100,301,335	63.9	102,803,203	65.5
Two or more races	2,864,759	1.8	**	**

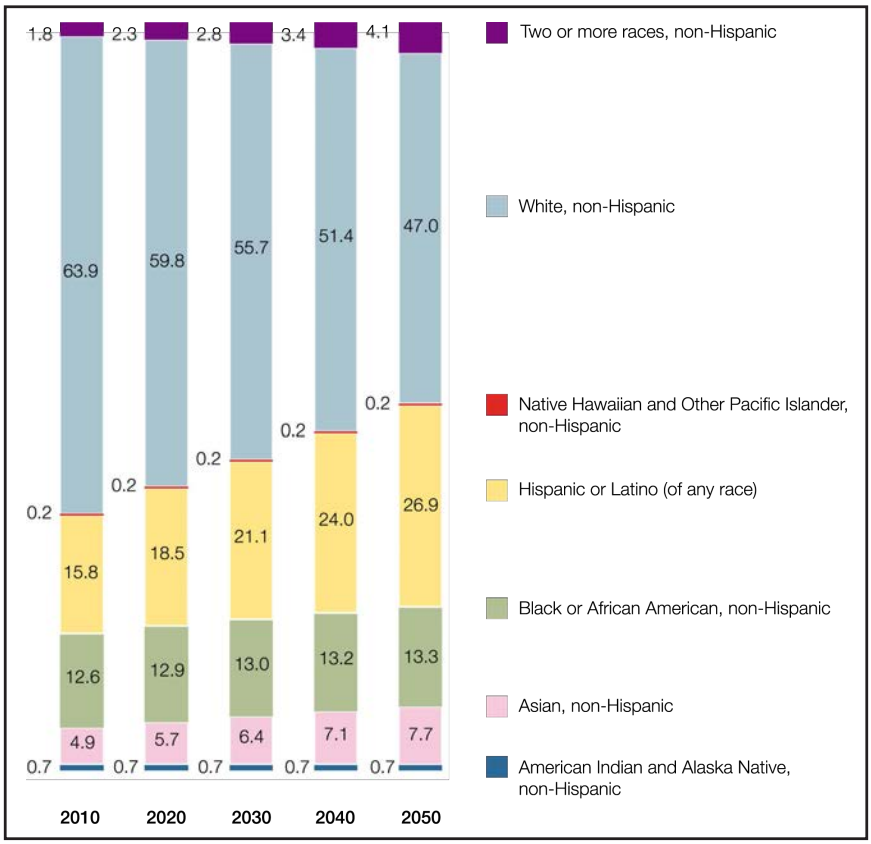
*"In combination" means in combination with one or more other races. The sum of the five race groups adds to more than the total population because individuals may report more than one race.

**The population reporting two or more races is reflected within each of the designated racial/ethnic categories above.

Source: U.S. Department of Commerce, Bureau of the Census, Population Division. (2011). Table 3. Annual estimates of the resident population by sex, race, and Hispanic origin for the United States: April 1, 2010 to July 1, 2011 (NC-EST2011-03). Retrieved from http://www.census.gov/popest/data/national/asrh/2011/index.html

Race and Ethnic Standards for Federal Statistics and Administrative Reporting.[5] These revisions were issued for comment by the Office of Management and Budget (OMB) in the mid-1990s, and their final version has guided the data collection in both the 2000 and 2010 decennial censuses. The new race/ethnicity terminology was adopted by other federal agencies as of January 1, 2003. If and when data are not available for some of the population subgroups as defined in the revisions to OMB Directive 15 (e.g., for Asians separate from Pacific Islanders), the most current data are provided for

Figure 1
Current and Projected Distributions of Female Population by Race and Hispanic Origin, 2010–2050



Source: U.S. Department of Commerce, Bureau of the Census, Population Division. (2012). Table 4. Projections of the population by sex, race, and Hispanic origin for the United States: 2015 to 2060 (NP2012-T4). Retrieved from http://www.census.gov/population/projections/data/national/2012/summarytables.html

the groups as available (e.g., Asians and Pacific Islanders jointly).[5]

The revised standards include five minimum racial categories: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, and white. Ethnicity is to be reported as either "Hispanic or Latino" or "Not Hispanic or Latino." The category "American Indians or Alaska Natives" includes people who trace their origins to any of the indigenous peoples of North and South America (including Central America) and who maintain a tribal affiliation or community attachment. "Asians" are people having their origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent. This includes people from, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. "Black or African American" refers to any person having origins in any of the black racial groups of Africa.[5,6]

The category "Native Hawaiian or Other Pacific Islander" includes people who trace their origins to any of the indigenous peoples of Hawaii, Guam, Samoa, or other Pacific Islands. The term *Native Hawaiian* does not include individuals who are native to the state of Hawaii only by being born there. Pacific Islanders include people with the following origins: Carolinian, Fijian, Kosraean, Melanesian, Micronesian, Northern Mariana Islander, Palauan, Papua New Guinean, Ponapean (Pohnpelan), Polynesian, Solomon Islander, Tahitian, Tarawa Islander, Tokelauan, Tongan, Trukese (Chuukese), and Yapese. "White"

refers to persons having origins in any of the original peoples of Europe, the Middle East, or North Africa. "Hispanic or Latino" refers to a person of Cuban, Mexican, Puerto Rican, South or Central American (nonindigenous), or other Spanish culture or origin, regardless of race.[5]

Population totals for Puerto Ricans residing in the Commonwealth of Puerto Rico are not included in the total U.S. Latino population; their totals are reported separately.[7]

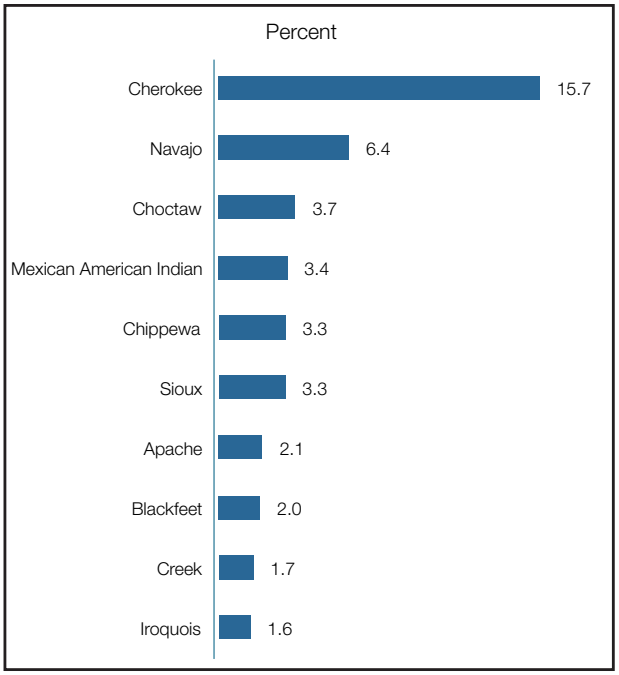
In addition to using the five minimum race/ethnic categories designated by the OMB in 1997, the 2000 and the 2010 censuses also reported data for a sixth category, "some other race." In fact, population totals from the 1990 census also provided data for the category "some other race." In 1990, nearly 4 percent (9.8 million people) of the enumerated population was of "some other race,"[8] and in 2000, 5.5 percent (15.4 million) was "some other race." By 2010, this share had increased to 6.2 percent and included more than 19.1 million people who designated "some other race" as their only affiliation. When single and multiple racial designations both were tabulated for the 2010 census, however, 21.7 million people (7.0 percent of the population enumerated) selected "some other race." A majority (95.2 percent) of the 21.7 million people who classified themselves as "some other race alone or in combination with one or more races" were Hispanic. This data book does not include findings for persons in this sixth category.[9]

In the Factors section of this data book, information for the population subgroups is presented in rough chronological order of the arrival date of any member of the group in what is now the United States. Thus, the order of presentation is American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, Hispanics or Latinos, blacks or African Americans, and Asian Americans. For groups designated by two terms generally accepted as equivalent, such as "black or African American," the two terms are used interchangeably in the text.

American Indians and Alaska Natives

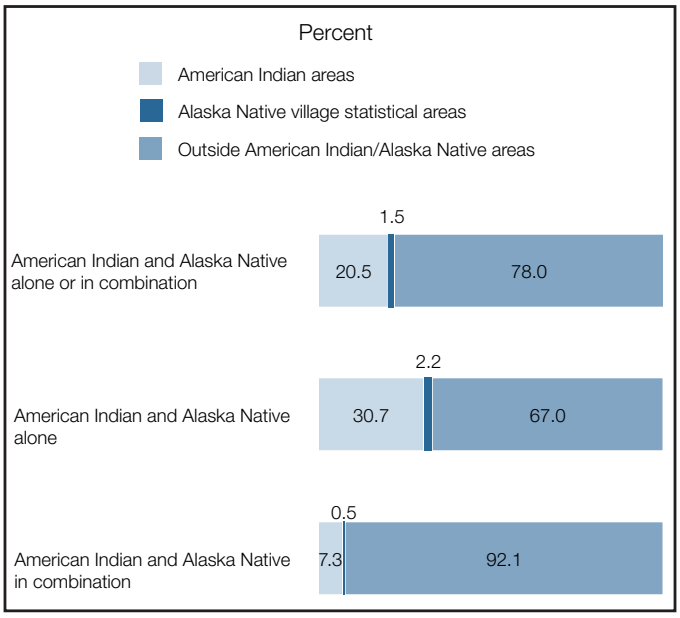
The ancestors of the people known today as American Indians/Alaska Natives lived in North America many centuries before Europeans came. Although between 1 million and 12 million Indians were estimated to be in what is now the United States when Columbus arrived in 1492,[10] in 2010, the Census Bureau estimated that more than 3.7 million people classified themselves as American Indian or Alaska Native only, and more than 6.1 million classified themselves as all or part American Indian or Alaska Native. Of the 3.7 million who identified as American Indian or Alaska Native alone (non-Hispanic and Hispanic combined), almost half (1.8 million) were women. The 2010 population figures for American Indians/Alaska Natives reflect a 40 percent increase over the 2000 census figures. The 2000 census reported nearly 2.7 million people who classified themselves as American Indian or Alaska Native only and more than 4.2 million who classified themselves as all or part American Indian or Alaska Native. The 2010 survey indicates a similar share of women to the 2000 census enumeration, which identified 1.3 million American Indian/Alaska Native women, slightly less than half of the 2.7 million people who designated themselves as American Indian/Alaska Native alone.[1]

Figure 2
Largest Tribal Groupings of the American Indian and Alaska Native Population, 2010



Source: Norris, R., Vines, P. L., & Hoeffel, E. M. (2012, January). The American Indian and Alaska Native population: 2010. *2010 Census Brief* (C2010BR-10), pp. 17–18. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf

Figure 3
Distribution of American Indian and Alaska Native Population by American Indian/Alaska Native Areas of Residence, 2010



Source: Norris, R., Vines, P. L., & Hoeffel, E. M. (2012, January). The American Indian and Alaska Native population: 2010. *2010 Census Brief* (C2010BR-10), p. 12. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf

American Indians/Alaska Natives constitute 566 federally recognized tribes,[11] as well as numerous tribes only recognized by individual states. (State-recognized tribes are not federally recognized, although federally recognized tribes may also be state recognized.[12]) The largest American Indian and Alaska Native tribal groups are the Cherokee (nearly 16 percent of the American Indian and Alaska Native population) and the Navajo (more than 6 percent of the American Indian and Alaska Native population).[13] Approximately 326 Indian land areas are administered in the United States as federal Indian reservations (e.g., reservations, pueblos, rancherias, missions, villages, communities). These trust lands cover approximately 56.2 million acres.[14]

The many American Indian/Alaska Native subpopulations are culturally distinctive, diverse, and complex, and some are growing faster than the general population. American Indians/Alaska Natives speak more than 200 distinct languages, which makes their dialects more diverse than the entire Indo-European language family.[15] This diversity, coupled with their many small population groups scattered throughout the United States, has made it difficult to provide a uniform, readily accessible health care system for American Indians/Alaska Natives. People who identify as American Indian and Alaska Native alone are more likely to live in American Indian areas or in Alaska Native village statistical areas than are people who identify themselves as American Indian and Alaska Native in combination with other racial and ethnic groups.[13] A third of American Indians and Alaska Natives alone live in American Indian or Alaska Native areas, while only 8 percent of American Indians and Alaska Natives in combination do so.

More than 7 of every 10 (71 percent) of those identifying as solely or part American Indian/Alaska Native live in urban areas.[16] According to the 2010 census, nearly one in eight individuals in Anchorage, Alaska, is either American Indian or Alaska Native alone or in combination (with other racial or ethnic groups). Nine percent and 8 percent of the populations in Tulsa, Oklahoma, and Norman, Oklahoma, respectively, report the same.[13]

Many urban Indians move back and forth between their homes in urban areas and their home reservations, with which they retain strong ties and visit for powwows and other cultural and social events.[17] Although American Indians/Alaska Natives are culturally diverse to the point that it often becomes meaningless to classify them together for any but the most gross comparisons, their shared experiences include forced removal from their ancestral homelands, brutal colonization, and confinement to reservations.[18]

Receiving health services via the federal government, as American Indians/Alaska Natives do because of treaty obligations, influences their ability to access and use health care services. The U.S. government has signed numerous treaties with tribes obligating it to maintain a reasonable level of education and health among American Indians/Alaska Natives.[19] The Indian Health Service (IHS)—since 1955 a part of the U.S. Public Health Service—provides health care through its clinics and hospitals to all American Indians or Alaska Natives who belong to federally recognized tribes and live on or near the reservations in its 12 service areas. These service areas contain 168 service units (analogous to county or city health

Table 3
Ten Places With the Largest Percentages of American Indians and Alaska Natives, 2010

Place	Total Population	American Indian and Alaska Native Alone or in Combination	
	Number	Rank by Percentage of the Total Population in Places	Percentage of the Total Population in Places
Anchorage, AK	291,826	1	12.4
Tulsa, OK	391,906	2	9.2
Norman, OK	110,925	3	8.1
Oklahoma City, OK	579,999	4	6.3
Billings, MT	104,170	5	6.0
Albuquerque, NM	545,852	6	6.0
Green Bay, WI	104,057	7	5.4
Tacoma, WA	198,397	8	4.0
Tempe, AZ	164,719	9	3.9
Tucson, AZ	520,116	10	3.8

Source: Norris, R., Vines, P. L., & Hoeffel, E. M. (2012, January). The American Indian and Alaska Native population: 2010. *2010 Census Brief* (C2010BR-10), p. 12. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf

departments) that operate hospitals and health centers and stations. The service units administered by the IHS operated 28 hospitals and 94 health centers and stations as of January 2013. The remaining service units are operated by American Indian or Alaska Native tribal governments and administer 16 hospitals and 474 health centers, stations, and Alaska village clinics.[20] The 2013 IHS service population consists of approximately 2.1 million American Indians and Alaska Natives who belong to the 566 federally recognized tribes.[20] (The service population is defined as "the number of Indian registrants, residing within a service delivery area with at least one face-to-face, direct or contract, inpatient stay, ambulatory care visit, or dental visit during the prior 3 fiscal years."[21])

Most IHS facilities are located on American Indian reservations, which are most often in rural areas.[22] However, 33 Indian-operated urban projects, either health clinics or community services and referrals,[23] provide care for the American Indians/Alaska Natives who live in urban areas and, therefore, have lost eligibility for IHS care near their reservations as the result of living away from them for 180 days.[24] These Indian-operated facilities also serve members of tribes that are not federally recognized (i.e., recognized only by their states).[25]

Services in urban areas and in nonreservation rural areas often are limited. In 2000, urban Indian health programs served an estimated 150,000 American Indians/Alaska Natives, or 6 percent of the entire American Indian/Alaska Native population.[23] The IHS appropriates only 1 percent of its annual budget to urban health programs,[26] despite the fact that approximately 25 percent of all American Indians/Alaska Natives live in areas served by those programs.[27] Overall, more than two of every five American Indians and Alaska Natives (41 percent) had private health insurance coverage. An additional 37 percent relied on Medicaid, and 29.2 percent had no health insurance coverage in 2010.[28]

Long distances between facilities account in part for urban American Indian women having both greater difficulties in obtaining access to prenatal care and less likelihood of getting such care than women of other racial/ethnic groups. American

Indians who live in the Nashville service area (with a 2009 population of 118,253 living in more than 13 states in the Northeast, on the Atlantic seaboard, and on the Gulf Coast) have access to two tribal-run hospitals but no IHS-operated hospital. In addition, they are able to receive health care at 31 tribal-run service units and three IHS-operated service units.[21] Although the population eligible for care in the Nashville service area is relatively small, the area served runs along the entire East Coast, from Maine to Florida.[29]

As of the beginning of fiscal year 2006 (i.e., October 1, 2005), the number of service units within each service area ranged from 2 in the Tucson area to 34 in the Nashville service area. Furthermore, both California (with a service population of 177,884) and Portland (188,161) had no IHS- or tribal-run hospitals, while Great Plains (formerly Aberdeen) (114,890) and Phoenix (195,547) each had eight hospitals.[21,29]

Another barrier to health care access for American Indians/Alaska Natives is the lack of federal funding for the IHS. Although the federal government is obliged by treaty to provide American Indians and Alaska Natives with a reasonable level of health care, the IHS does not guarantee services to its customer population as an entitlement. Instead, it provides services on the basis of federal funding available. After adjusting for inflation and population growth, the amount of funding the IHS received annually steadily decreased from 1993 to 2007.[30,31]

How has the legacy of American Indians/Alaska Natives in this country influenced the health of the women of these groups? Forced relocation took place beginning with the Indian Removal Act of 1830, which relocated tribes from east of the Mississippi River to west of the Mississippi River. Later displacement took place during the 1950s and 1960s, when, in an attempt to end the United States' legal responsibility for American Indians and to mainstream them, the Bureau of Indian Affairs relocated 160,000 American Indians from rural reservations to urban areas.[19,32] Instead of mainstreaming, urban living brought continued unemployment and poverty to many American Indians/Alaska Natives. This migration placed American Indians in communities where their youth encountered discrimination and adversity that resulted in their demoralization and engagement in delinquent and health risk behaviors such as early substance abuse.[33]

Racism and mistrust of the U.S. government have engendered low self-esteem among many American Indians/Alaska Natives. Racism and discrimination also have contributed to the poverty in which 29 percent of American Indians/Alaska Natives (alone) lived in 2011. Specifically, nearly 28 percent of American Indian or Alaska Native males and more than 31 percent of American Indian or Alaska Native females reported incomes below the federal poverty level in 2011. Poverty rates among single-parent American Indian/Alaska Native families are even greater than poverty rates for individuals. One-third (32 percent) of all American Indian/Alaska Native families were headed by females, and 44 percent of these households had incomes below the federal poverty level. The poverty rate was 29 percent for male-headed families and 12 percent for married-couple families. More than one-third (37 percent) of all American Indian/Alaska Native children younger than 18 years are estimated to live in poverty.[34]

This poverty stems from the high unemployment rates among both American Indian/Alaska Native men and women. In 2011, although unemployment for men of all races was nearly 11 percent, among American Indian men, the rate was 19 percent. American Indian women were better off than American Indian men, with an unemployment rate of more than 15 percent. The unemployment rate for women of all races in 2011 was nearly 10 percent.[34]

Poverty and unemployment have in turn fostered welfare dependency and diets replete with government commodity foods, high in both fat and calories. The malnutrition that was a problem among American Indians/Alaska Natives two generations ago has been replaced by obesity. A sedentary lifestyle and sharp decreases in hunting and gathering are implicated in the high prevalence of obesity and related health problems and mortality among American Indians/Alaska Natives. Seventy-two percent of male and 68 percent of female American Indians/Alaska Natives (single race) are reported to be overweight and, therefore, at risk for diabetes and other illnesses.[35] Approximately 16 percent of American Indian/Alaska Native adults have diabetes, a rate twice that of the general U.S. population.[36] However, the 16 percent rate is likely an underestimation because it accounts neither for people with undiagnosed diabetes nor for the approximately 40 percent of American Indians/Alaska Natives who do not live on or near reservations, do not receive care from IHS or tribal health facilities, and therefore are not captured in health data systems.[37] Age-adjusted death

rates from diabetes mellitus among American Indians/Alaska Natives are nearly twice those for whites.[38]

Historical suppression of indigenous religions and medical practices, as well as environmental issues, has combined with poverty to create health risks for American Indians/Alaska Natives.[39] Traditional gender roles (as hunters, horsemen, providers, and protectors) for many American Indian/Alaska Native males have been lost, as jobs have become scarce and opportunities to fish and hunt the land as their ancestors did are restricted on reservations. Some men internalize their feelings of loss and anger and channel their rage against American Indian/Alaska Native women, who must still fulfill the caretaker role for their families. Narratives from Native American men reveal the strong belief that alcohol use is both symbolic of the colonization experience and a factor in domestic violence and child abuse. American Indian victims of intimate and family violence are more likely than victims of other races to be injured and need medical attention.[40]

Across Indian country, the high occurrence of alcohol and substance abuse, mental health disorders, suicide, violence, and behavior-related chronic diseases is well documented. Each of these serious behavioral health issues has a profound impact on the health of individuals, families, and communities, both on and off reservations. For example, American Indians and Alaska Natives are significantly more likely to report past-year alcohol and substance use disorders than any other race, and their suicide rates are 1.7 times the rate of the general population. Domestic violence rates are also alarming, with 39 percent of American Indian and Alaska Native women experiencing intimate partner violence—the highest rate in the United States.[41]

Alcoholism and its multigenerational effects are at the root of many of the health problems experienced by American Indian/Alaska Native women, as evidenced by the magnitudes of their death rates from alcoholism, cirrhosis, and other liver diseases. (See "Other Causes of Death" in the Health Assessment section of the *Women of Color Health Data Book*.) American Indian/Alaska Native women often escape into alcohol or drugs to cope with prior victimization (from incest, rape, and other forms of sexual assault), sometimes experienced in childhood or adolescence. Doing so, however, contributes to their higher mortality rates from alcohol- and drug-related causes than among other groups of women.[42]

Among American Indian and Alaska Native women, death rates associated with alcoholism are much higher than among women of all races. For the 2002–2004 period, mortality related to alcoholism among American Indian/Alaska Native women ages 25 to 34 years was more than 15 per 100,000 population, more than 25 times the rate of their counterparts of all races (0.6 per 100,000 population) in 2003. American Indian/Alaska Native women ages 45 to 54 years had a mortality rate due to alcoholism of more than 65 per 100,000 in the 2002–2004 period, in contrast to 8 per 100,000 women of all races in 2003.[29] Among females in 2009, American Indians or Alaska Natives had the highest death rate from alcohol-induced causes—20 per 100,000 population. Rates for females who are white non-Hispanic (4 per 100,000), black non-Hispanic (3 per 100,000), Hispanic (3 per 100,000), and Asian or Pacific Islander (0.7 per 100,000) are considerably lower.[38]

American Indian/Alaska Native women who are alcoholics or substance abusers, however, often do not receive hospitalization, detoxification, or counseling for their addictions. One study of American Indians on reservations showed that two-thirds of the women who had substance abuse problems had not received treatment in the past year.[43] Many factors serve as barriers to treatment for women, such as a lack of child care, transportation problems, the opposition of their partners, and fear of stigma. In the past, many addiction treatment programs were located outside of American Indian and Alaska Native communities and failed to incorporate healing elements from Native cultures. Although still true today, recently, more treatment programs have been developed close to or in American Indian and Alaska Native communities. These programs are tailored to the needs and cultural beliefs of American Indians and Alaska Natives and often incorporate into the services offered elements of traditional medicine—such as talking circles, sweat lodges, and medicine wheels.[44] Such programs offer a more holistic form of treatment that focuses on the whole person, rather than just on the disease, as is often true in Western treatment models.

The prevailing life circumstances for many American Indian/Alaska Native women jeopardize their health in yet another way. Poverty, low self-esteem, alcoholism, and substance abuse often interfere with their ability to seek preventive health care. Preventive health care for cancers, in particular, may

be even longer in becoming a reality because, despite the growing prevalence of cancer in American Indian/Alaska Native communities, many American Indians and Alaska Natives still view cancer as a "white man's disease."[45] Cancer is often viewed as punishment and not discussed for fear of stigma and shame. Even when discussion of cancer and cancer prevention is acceptable in a community, cancer prevention can be hindered by other barriers. Cancer education materials requiring high literacy levels are often provided to communities where literacy rates and reading comprehension levels are low. Screening facilities are often located far from communities, and the lack of culturally sensitive providers can discourage American Indians and Alaska Natives from returning for care.[45] Mistrust of health providers and contemporary prejudice and miscommunication further limit the ability of American Indian/Alaska Native women to receive preventive health care for cancer and other medical conditions.[46,47]

The response to HIV/acquired immunodeficiency syndrome (AIDS) by American Indians/Alaska Natives reflects their long history of mistreatment by the U.S. government and, consequently, the complexities related to providing services to them.[48] Although historical trauma and trauma from interpersonal violence among American Indians/Alaska Natives contribute to their risk of acquiring HIV infection, stigma and homophobia associated with HIV infection and AIDS within some American Indian/Alaska Native communities further compound the difficulty of addressing this health problem.[49,50]

Both geographic and cultural barriers make it difficult for American Indians/Alaska Natives to trust health care officials, health care systems, and researchers. Cultural barriers include prevailing feelings of distrust of the government. This distrust is due to a history of unethical medical research and health-related mistreatment by European colonizers in centuries past (whose use of smallpox-infested blankets killed millions of American Indians) and by the U.S. federal government and its Indian Health Service (which conducted experimental surgeries and performed unapproved sterilizations on American Indians as recently as the 20th century) in more recent times.[48] Geographic barriers can prevent American Indian/Alaska Native communities from getting funding and other resources to initiate HIV/AIDS prevention and treatment services, due to the distance between many American Indian/Alaska Native communities and the state and county health agencies and HIV-related organizations that can provide resources.[48]

To help address the growing problem of HIV/AIDS among American Indians/Alaska Natives, the National Native American AIDS Prevention Center (NNAAPC) has been active in Native communities since its founding in 1987 by American Indian and Alaska Native activists, social workers, and public health professionals, as have other organizations.[51] In addition to the outreach, prevention, and care activities sponsored by the NNAAPC (based in Colorado), in 2013, state legislators in Arizona and New Mexico began to collaborate to stem the recent increase in new cases of HIV infection among members of the Navajo nation. Women accounted for a third of the new cases diagnosed in recent years.[52]

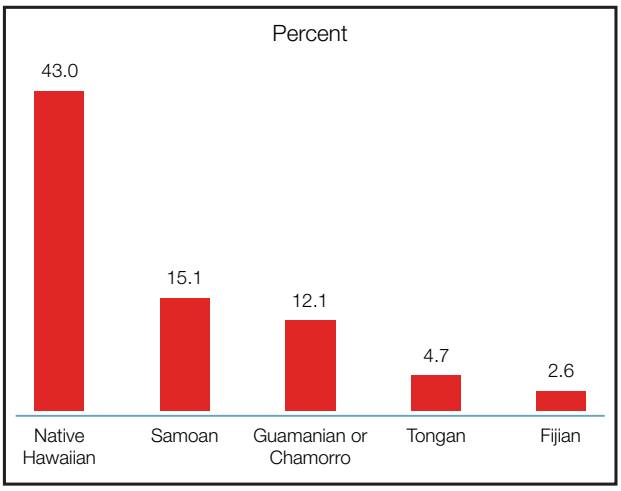
Native Hawaiians and Other Pacific Islanders

The 2010 census counted nearly 540,000 people in the United States who identified themselves as Native Hawaiians and Other Pacific Islanders (NHPIs) alone. Nearly 266,000 of the 540,000 were women (both Hispanic and non-Hispanic).[53] In addition, 685,000 people reported their race as Native Hawaiian and Other Pacific Islander in combination with one or more other races. Together, these two groups totaled 1.2 million people, accounting for 0.4 percent of all people in the United States.[54] Native Hawaiian was the largest NHPI group, with a total of 527,000 people reporting Native Hawaiian alone or in combination with any other group. The Samoan population (184,000 alone or in combination with any other group) and the Guamanian or Chamorro population (148,000 alone or in combination with any other group) were the second and third largest NHPI groups, respectively.[54]

Between 2000 and 2010, the total U.S. population grew by 9.7 percent, from 281.4 million in 2000 to 308.7 million in 2010. In comparison, the Native Hawaiian and Other Pacific Islander–alone population increased by 35 percent, more than three times faster than the total U.S. population, growing from 399,000 to 540,000 people. The NHPI alone-or-in-combination population experienced more growth than the NHPI-alone population, growing by 40 percent from 874,000 in 2000 to 1.2 million in 2010. In fact, the NHPI alone-or-in-combination population

Figure 4

Native Hawaiian and Other Pacific Islander (Alone or in Any Combination) Population by Selected Subgroups, 2010



Source: Hixson, L., Hepler, B., & Kim, M. O. (2012, May). The Native Hawaiian and Other Pacific Islander population: 2010. *2010 Census Brief* (C2010BR-10), p. 16. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-12.pdf

Table 4

Native Hawaiian and Other Pacific Islander (Alone or in Any Combination) Population by Detailed Subgroups, 2010

Subgroup	Number*	Percent
Polynesian		
Native Hawaiian	527,077	43.0
Samoan	184,440	15.1
Tongan	57,183	4.7
Tahitian	5,062	0.4
Tokelauan	925	0.1
Other Polynesian	9,153	0.7
Micronesian		
Guamanian or Chamorro	147,798	12.1
Mariana Islander	391	**
Saipanese	1,031	0.1
Palauan	7,450	0.6
Carolinian	521	**
Kosraean	906	0.1
Pohnpeian	2,060	0.2
Chuukese	4,211	0.3
Yapese	1,018	0.1
Marshallese	22,434	1.8
I-Kiribati	401	**
Other Micronesian	29,112	2.4
Melanesian		
Fijian	32,304	2.6
Papua New Guinean	416	**
Solomon Islander	122	**
Ni-Vanuatu	91	**
Other Melanesian	222	**
Other Pacific Islander	240,179	19.6
Total	**1,225,195**	**100.0**

*The numbers by detailed Native Hawaiian and Other Pacific Islander (NHPI) group do not add to the total NHPI population because respondents reporting several NHPI groups were counted several times.

**Percent rounds to 0.0.

Source: Hixson, L., Hepler, B., & Kim, M. O. (2012, May). The Native Hawaiian and Other Pacific Islander population: 2010. *2010 Census Brief* (C2010BR-10), p. 16. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-12.pdf

was the second fastest growing racial group in the country, following the Asian alone-or-in-combination population.[54]

NHPIs come from three major land areas—known as Polynesia, Micronesia, and Melanesia—located in the Pacific region.[55] The majority are from Polynesian islands, the islands in the central and south Pacific that are farthest from Asia. In 2010, 64 percent of NHPIs alone or in any combination were Polynesians. This includes more than 527,000 Native Hawaiians, 184,000 Samoans, 57,000 Tongans, 5,000 Tahitians, 900 Tokelauans, and 9,000 of other groups.[54] Ninety-three percent of the residents of American Samoa were Native Hawaiians or Other Pacific Islanders, including both Samoans (who are 89 percent of the American Samoan population) and Tongans (who are 3 percent of this population). The rest of the population of American Samoa consists of the 3.6 percent who are Asian, the 0.9 percent who are white, and the 2.7 percent who are of two or more other racial/ethnic groups.[56]

Micronesians are the second largest Pacific Islander group—about one in every six NPHIs—and Guamanians or Chamorro (nearly 148,000 in 2010) are the largest Micronesian subpopulation,[54] making up more than 12 percent of NHPI alone or in any

Table 5

Ten Counties With the Largest Percentages of Native Hawaiians and Other Pacific Islanders, 2010

County	Total Population	Native Hawaiian and Other Pacific Islander Alone or in Combination	
	Number	Rank	Percentage of the Total County Population
Hawaii County, HI	185,079	1	33.8
Maui County, HI	154,834	2	27.3
Kauai County, HI	67,091	3	25.9
Honolulu County, HI	953,207	4	24.5
Anchorage Municipality, AK	291,826	5	2.8
Washington County, AR	203,065	6	2.2
Pierce County, WA	795,225	7	2.1
San Mateo County, CA	718,451	8	2.1
Salt Lake County, UT	1,029,655	9	2.0
Garfield County, OK	60,580	10	1.9

Source: Hixson, L., Hepler, B., & Kim, M. O. (2012, May). The Native Hawaiian and Other Pacific Islander population: 2010. *2010 Census Brief* (C2010BR-10), p. 1. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-12.pdf

combination in the 2010 census. Most Guamanians or Chamorro are of mixed ancestry, descended from the indigenous Chamorro of Guam who intermarried with settlers primarily from Spain, Japan, the Philippines, and the United States. The Chamorro are more than one-third (37 percent) of the residents of Guam, with Filipinos more than one-fourth (26 percent); Chinese, Japanese, and Koreans together more than 5 percent; and whites more than 7 percent. Nine percent of the residents of Guam are of two or more races.[57] The second largest Micronesian subpopulation is Marshallese (people from the Republic of the Marshall Islands), who numbered nearly 22,500 in 2010.[54] Other Micronesian islands include the Carolines, the Marianas, the Republic of Palau, Pohnpei, Chuuk, and the Republic of Kiribati.

Melanesians are only 2.6 percent of Pacific Islander Americans, with the more than 32,000 Fijians (including both natives and descendants of the Asian Indians who came to work the coconut plantations in the late 1800s and early 1900s) the dominant group.[54] Other Melanesian populations include residents from Papua New Guinea, New Hebrides (now Vanuatu), New Caledonia, and the Solomon Islands. The United States maintains formal political associations with peoples from Polynesia and Micronesia but not from Melanesia.

In 2010, more than half (52 percent) of the Native Hawaiian and Other Pacific Islander alone-or-in-combination population lived in just two states, Hawaii (356,000) and California (286,000). The next largest NHPI populations in 2010 were in the following states: Washington (70,000), Texas (48,000), Florida (40,000), Utah (37,000), New York (36,000), Nevada (33,000), Oregon (26,000), and Arizona (25,000). More than three-fourths (78 percent) of the entire NHPI population in the United States live in these 10 states.[54] The more than 135,000 people who designated themselves as Native Hawaiian and Other Pacific Islanders alone and resided in Hawaii were 10 percent of the state's

population. Considering people who selected Native Hawaiian and Other Pacific Islanders in addition to one or more other races increases this population total for the state of Hawaii to nearly 356,000, or 26 percent of its total population.[58] In Hawaii County, Hawaii, people who identify as Native Hawaiians and Other Pacific Islanders alone and in combination are a third of the total population.[54]

The Native Hawaiians and Other Pacific Islanders who lived in California in 2010 constituted a much smaller share of its population—0.4 percent for NHPI alone and 0.8 percent for NHPI alone or in combination with other races.[59] In addition, one-third (33 percent) of the Samoan alone-or-in-any-combination population counted in the 2010 census lived in California, and nearly one-fourth (23 percent) of all Tongan Americans lived in Utah, many of them Mormon converts brought to the United States by missionaries.[54]

Health Care Systems

The major challenge faced by the health systems of all the Pacific territories is their need to provide services to a population scattered over many islands and many miles. Although the political relationships between the United States and selected island nations in the Pacific Ocean to the west of Hawaii differ, affiliation with the United States is mirrored in the similarities of the health care systems that have evolved. The location of these territories relative to Hawaii, Asia, and the mainland United States, however, results in these islands that share Pacific territories encountering similar challenges with respect to medical and public health staffing and facilities. In many of the territories, innovative methods have been developed to work around these challenges and meet the health care needs of the residents.[60,61,62,63]

Guam, the westernmost territory of the United States, is an unincorporated island with limited self-governing authority and a 2010 population of 181,000.[64,65] The health system in Guam includes two major hospitals, a network of clinics, and medical evacuation operations to Hawaii, the U.S. mainland, and the Philippines. The Naval Regional Medical Center serves active-duty personnel, military dependents, and veterans, while Guam Memorial Hospital, a government-owned facility, serves the rest of the population.[66]

The Republic of Palau (also known as Belau)—despite being a small (with a population of about 20,000), relatively isolated island with limited resources and funding—has a well-organized, efficient, innovative, and effective public health system.[67] Facilities on the island include two private medical clinics and an 80-bed public hospital, the Belau National Hospital on Koror. (Koror is one of the three most populous of the eight permanently inhabited islands that constitute the Republic of Palau.[61]) Along with the clinics and a hospital, Palau has four community-owned health centers (known as "super dispensaries" because they provide urgent care and preventive services) and five smaller community clinics located in outer villages and islands. This health system has been supported in part by funding under a Compact of Free Association ratified by Palau and the United States in 1993. Continuation of the compact and of associated health system enhancements depends on the passage of legislation to renew the Compact of Free Association between the United States and the Republic of Palau. Although legislation to achieve this was introduced in the House of Representatives in 2012 and referred to the relevant subcommittee, no further action was taken on it.[68]

American Samoa is an unincorporated territory of the United States whose residents are U.S. nationals and may become naturalized U.S. citizens.[69] American Samoa has one hospital, the Lyndon Baines Johnson (LBJ) Tropical Medical Center, a 128-bed general acute-care hospital. Five primary health centers also are available to serve the population on the island, which numbers more than 55,500 (2010).[56] The hospital does not provide tertiary health care services, however, so patients must be referred off the island (mostly to Hawaii) for most specialist care, an expense that consumes a large and growing share of American Samoa's health care budget. In 2012, the government approved a $3 million loan (from the Workmen's Compensation Fund) to the American Samoan Medical Center Authority (ASMCA) to support the off-island referral program as well as the general operations of the ASMCA.[70]

Like American Samoa, the hospitals and other facilities serving the Commonwealth of the Northern Marianas, the Marshall Islands, and the Federated States of Micronesia do not provide tertiary care. Thus, patients needing specialized care must be referred off-island to get it.[71] Islands that use off-island referrals subsidize the care to their patients but also seek ways to reduce their system-wide costs. This cost sometimes combines with equipment, supply, and

drug shortages to reduce the quality of care on the island territories.

Native Hawaiians

Native Hawaiians are individuals whose ancestors were natives of the Hawaiian islands prior to initial contact with Europeans in 1778. Although the 1778 Native population of the seven inhabited Hawaiian islands is estimated as 300,000, one century after European contact (i.e., in 1878), the Native Hawaiian population had declined by more than 80 percent, to 57,985.[72] During the past 235 years (between 1778 and 2013), Native Hawaiians have faced traumatic social changes, resulting in the loss of their traditions and threatening their survival as a distinct group. Most of this decline was due to venereal diseases (resulting in sterility), miscarriages, and epidemics such as smallpox, measles, whooping cough, and influenza. Poor housing, inferior sanitation, hunger, malnutrition, alcohol, and tobacco use also contributed to the decline.[73]

As a result, the population of Hawaii today is multiracial and multiethnic, with only an estimated 5,000 full-blooded Native Hawaiian descendants remaining as of the 1990 census (the last census that collected such information).[74] However, more than 80,000 residents of Hawaii chose Native Hawaiian as their sole racial identification in the 2010 census.[58] Native Hawaiians are today defined to include both "pure" Hawaiians and part Hawaiians. In 2010, Native and part Hawaiians combined were a fifth of the population on Hawaii (21 percent)[75] and accounted for more than one-fourth (29 percent) of the newborns on the Hawaiian islands in 2009.[76]

Forty-five percent of Native Hawaiians/Part Hawaiians reside outside of the state of Hawaii, with more than half (51 percent) of these non-Hawaii residents living in the states of California, Oregon, Nevada, and Washington. Most statistics for Native Hawaiians, however, represent the 55 percent of the population residing in Hawaii.[77]

Native Hawaiians have a higher median household income than the general U.S. population. In 2010, the median household income was $59,755 for Native Hawaiians living in Hawaii and $58,415 for Native Hawaiians living in the United States overall.[78] In contrast, median household income for the United States was $50,046.[79] The 2010 poverty rate was 12.1 percent for Native Hawaiian families in Hawaii and 11.3 percent for Native Hawaiian families living in the United States overall.[80] These rates were comparable to the poverty rate among all families in the United States (11.3 percent) at that time.[79]

Native Hawaiians have poorer health outcomes (such as a lower life expectancy) than other groups in Hawaii.[81] In one survey comparing whites, Filipinos, Japanese, and Native Hawaiians in Hawaii, Native Hawaiians ranked highest in behavioral risk factors, such as being overweight, smoking, and excessive use of alcohol, but not in the risk factor for physical inactivity. In 2010, more than three-quarters (76 percent) of Native Hawaiian adults in Hawaii were overweight or obese,[82] compared with less than two-thirds (64 percent) of all adults in the United States.[83]

Obesity is implicated in high rates of diabetes among Native Hawaiians—especially those age 35 years and older—who accounted for 22 percent of all cases reported in the state of Hawaii in 2010.[84] In addition, 13.9 percent of all Native Hawaiians are known to be diabetic.[85]

Heart disease and cancer are the major causes of death among Native Hawaiians, as among other populations in the United States. Hypertension (also known as high blood pressure), a major risk factor for both coronary heart disease and stroke, is also a problem for Native Hawaiians. Although a smaller percentage of Native Hawaiians living in Hawaii had hypertension (13 percent) than did the general population in Hawaii (17 percent), Native Hawaiians ages 55 to 64 years had a higher prevalence rate (49 percent) than did the general population (35 percent) in Hawaii in 2010.[84]

Breast cancer is the most common cancer among Native Hawaiian females.[86] In addition, Native Hawaiian females have the highest breast cancer incidence of all women in Hawaii.[87] Because the perception of cancer in Hawaiian culture is bound up with beliefs about shame, guilt, and retribution, Native Hawaiian patients with breast cancer also often are fatalistic.[88] Indeed, some patients may feel powerless to control the outcome of the disease and therefore do not fight their disease as vigorously as women of other racial/ethnic groups.[88] Native Hawaiians also often enter medical treatment at late stages of diseases. They sometimes seek medical treatment only when self-care and traditional practices have not brought sufficient relief.[88,89] Native Hawaiian culture emphasizes the preservation of harmony (*lokahi*), which sometimes results in the tendency for individuals to minimize the

importance of events such as illnesses that may set them apart or reflect disharmony.[90] This tendency results in delays in seeking services.

As a result, the experience of cancer for Native Hawaiian women sometimes includes both shame and guilt. Native Hawaiian women without health insurance may hesitate to use free screening services because they wish to avoid the shame of being negatively evaluated or discriminated against on the basis of their need for free services.[90] Guilt may result from the sense that their illness has caused disharmony and altered the chain of familial responsibilities.[89]

One way to address the cultural barriers related to delivering health care services to Native Hawaiian women would be to incorporate traditional cultural systems such as the roles of *ho'omana* (religion and spirituality) and *haku* (family liaison or primary support systems) with the delivery of health care.[89,90] Because Native Hawaiian culture is focused on affiliation and close personal bonds to solve or cope with problems, Native Hawaiians are uncomfortable with impersonal bureaucracies and the reliance on expert authority within these systems.[89] Having multidisciplinary teams of providers, including both Western-trained practitioners and traditional healers, could enable each caregiver to learn from the other and would establish a bridge to enhance the provision of care to Native Hawaiians.[91]

Respect for the importance of *'ohana* (family, or interdependence and mutual help and connectedness from the same root of origin) also is critical to developing effective health care delivery systems for Native Hawaiians.[89,90] Studies of interventions to promote breast and cervical cancer screening among Native Hawaiian women have found that using *kōkua* to deliver education and support through *'ohana* and friendship networks was well received and led to improvements in screening-related behaviors.[89,90] The federally funded Native Hawaiian Health Care System includes examples (such as the Nā PuUwai Native Hawaiian Health Care System on the island of Molokai) of community-based health care centers culturally sensitive to the needs of Native Hawaiians.[91]

Other Pacific Islanders

Samoa, a group of islands in the southern Pacific Ocean about halfway between Hawaii and Australia, is divided into two parts: American Samoa (an unincorporated territory of the United States) and Samoa (formerly Western Samoa), which has been an independent country since 1962.[92] On U.S. soil, there were 184,440 Samoans (the second most populous Pacific Islander group after Native Hawaiians), most of whom resided primarily in California (60,876 people), American Samoa (50,675 people), and Hawaii (37,463 people). The population of American Samoa was 55,519.[56] Mainland residents maintain close ties to families in American Samoa by visiting on ritual occasions, sending monthly remittances, and helping new migrants to the mainland.[93]

Samoans are among the most obese populations in the South Pacific and in the world. Compared with their less Westernized counterparts in Samoa, American Samoan women report higher risk factors and more related diseases. For example, although two of every three (66 percent) Samoan women ages 25 to 64 years were obese, four of every five American Samoan women in the same age group were obese. In addition, American Samoan women ages 25 to 64 years were nearly twice as likely (42 percent) as Samoan women the same ages (22 percent) to report diabetes mellitus.[94]

Average life expectancy at birth in 2012 for Samoans living in American Samoa was estimated as 74.4 years, following the traditional pattern of being somewhat lower for males (71.5 years) and somewhat higher for females (77.6 years).[95] The all-causes age-adjusted death rate for American Samoans in 2010 was 932.9 per 100,000, considerably higher than the rate of 747 per 100,000 residents of the 50 states in the United States.[96] In decreasing order of frequency, the major causes of death among adult Samoans are heart disease, cancer, diabetes, and cerebrovascular disease. Breast cancer is the most common type of cancer newly diagnosed for Samoan women. However, lung cancer is the deadliest cancer for Samoan women.[97]

Access to health care among Samoans living on American Samoa is unique, in part due to the political relationship between the United States and the territory. Because this set of islands, the only U.S. territory south of the equator, located 240 miles southwest of Hawaii (the nearest site for tertiary care for residents of American Samoa), is medically underserved, American Samoa receives funding from the U.S. government for both the Medicaid and Medicare programs.[98] Although American Samoa is covered by the 2010 Affordable Care Act, in March 2012, Governor Togiola of American Samoa commu-

nicated to the U.S. Department of Health and Human Services his decision to not establish the health insurance exchanges (formally the American Health Benefit Exchange) that are part of the act. Because more than 80 percent of the population of American Samoa is Medicaid eligible and the island does not have a sufficient number of third-party insurance providers, he feels that creating a health insurance exchange on American Samoa would not achieve the intended legislative purpose. Thus, American Samoa will use the Medicaid expansions supported by the federal government under this act, but not the health exchanges, to meet the health care needs of American Samoans.[99]

Access barriers for Samoans living on the U.S. mainland differ somewhat from barriers encountered on American Samoa. Samoans living on the U.S. mainland are more likely to be poor than other Americans. Eighteen percent of all Samoan families living on the U.S. mainland have incomes below the poverty level, compared with 7 percent of all white non-Hispanic families.[34]

Samoan beliefs about the etiology of disease often constitute a barrier for them when seeking care. Elements of *fa'a Samoa,* the way of life that distinguishes the Samoan community from other Pacific Islanders, influence beliefs and care-seeking behaviors.[100] (American Samoans believe, for example, that the failure to follow the *fa'a Samoa* could lead to cancer and that a return to *fa'a Samoa* could prevent cancer.) Traditional modesty and the reluctance of American Samoans to discuss personal issues, however, inhibit the use of preventive health services for cancer and other conditions.

Cancer is a major public health problem among Pacific Islanders, in part due to thermonuclear weapons testing by the United States in the South Pacific.[88] This testing has poisoned the soil so that, for example, residents of the Bikini Atoll in the Republic of the Marshall Islands cannot eat food grown there. Residents of Kosrae and Pohnpei States in the Federated States of Micronesia were affected as participants in the cleanup of the South Pacific testing sites, and evidence of radioactive strontium has been found on the shores of Guam.[88] Cancer is a special problem for residents of the Republic of the Marshall Islands, the site of testing between 1946 and 1958.[101,102]

On Guam, in 2010, a majority of women age 40 years or older (64.4 percent) and age 50 years or older (71.4 percent) reported having received mammography screening within the past 2 years. More than two of every three women age 18 years or older (68 percent) on Guam also reported having had a Pap test to screen for cervical cancer. Thus, women in Guam are making use of the available preventive tests for cancers.[103]

Recent estimates suggest that 35,000 non-Hawaiian Pacific Islanders live in Hawaii. More than half of these are Samoans, and most of the others are from the Republic of the Marshall Islands and the Federated States of Micronesia.[88] Although American Samoa, the Republic of the Marshall Islands, and the Federated States of Micronesia have Breast and Cervical Cancer Control Programs (BCCCPs) funded by the U.S. Centers for Disease Control and Prevention, the capacity and reach of the programs are limited in these territories. Non-Hawaiian Pacific Islanders living in Hawaii often underuse the BCCCP services there, likely due to lack of awareness about the importance of screening, the lack of health insurance coverage—or the lack of resources for copayments if covered—and the lack of transportation to screening locations.[88] To remedy this lack of access to some extent, Cancer Patient Navigation and peer educator programs have been developed for both Native Hawaiians and Micronesians in Hawaii.

Diabetes is another major public health problem among Pacific Islanders. More than 41 percent of adults ages 25 to 64 years on the Marshall Islands have diabetes, as do 11 percent of Guamanians.[94,103] Eleven percent of both the males and females on Guam have diabetes, with the white population (4.8 percent) less likely to report the condition than other populations on the island.[103] As noted previously, in American Samoa, 42 percent of women have diabetes.[94]

In response to the prevalence of diabetes among the U.S. territories in the Pacific Islands, in 1998, the Pacific Diabetes Today Resource Center (PDTRC) was established to help train health care professionals and community leaders in Hawaii, American Samoa, Guam, the Republic of the Marshall Islands, the Commonwealth of the Mariana Islands, Palau, and the Federated States of Micronesia to prevent and control diabetes in their communities.[104] Although the funding from the Centers for Disease Control and Prevention for PDTRC ended in 2004, 9 of the 11 community coalitions developed around diabetes prevention activities continued to provide diabetes-

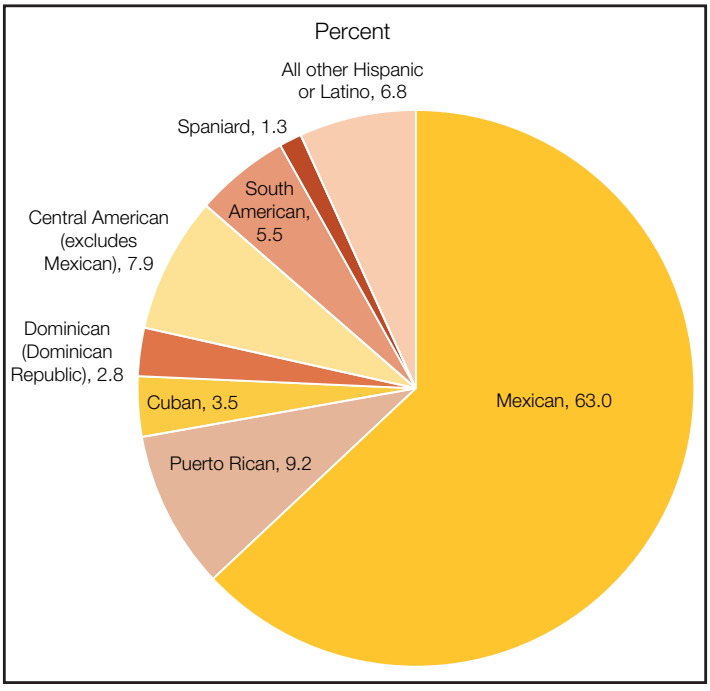
related programming. These coalitions shared several noteworthy characteristics: community champions, supportive organizational homes for their programs, and access to technical assistance and resources.[105]

Hispanics or Latinos

The earliest forebears of the group known today as Hispanic Americans or Latinos were Spanish colonists who came from Mexico in the late 1500s to live in what is now the Southwestern United States. The descendants of these colonists and of other Spanish-speaking populations who arrived after them constitute the largest of the ethnic groups in the United States today, numbering 50.5 million, with an additional 3.7 million Hispanics residing in the Commonwealth of Puerto Rico, according to the 2010 census.[106] In 2000, there were 35.3 million Hispanics living in the United States in addition to 3.8 million Hispanic residents in Puerto Rico.[106] Between 2000 and 2010, the Hispanic population grew by 43 percent, more than four times the growth rate of the total population of 10 percent.[106] The proportion of Hispanics in the total population grew from 12.5 percent in 2000 to 16.3 percent in 2010.[106] The Hispanic female population grew from more than 17 million in 2000[107] to nearly 25 million in 2010, almost half of the Latino population in the United States.[108]

Today, those who identify themselves as Hispanic or Latino come from a variety of countries in Latin America, the Caribbean, and Europe, with more than a third (35.8 percent) having arrived in the United States between 2000 and 2011.[109] The major Hispanic subgroups identified in the 2010 census are Mexican Americans (63 percent), Puerto Ricans (9.2 percent), and Cuban Americans (3.5 percent). Those who identified themselves as "Other Hispanics" constituted nearly a quarter (24.3 percent) of the more than 50 million Hispanics in the continental United States. This subgroup includes Central Americans (7.9 percent of all Hispanics); South Americans (5.5 percent of all Hispanics); people from the Dominican Republic, known as Dominicans (2.8 percent of all Hispanics); people from Spain, known as Spaniards (1.3 percent of all Hispanics); and an additional 6.8 percent of the Hispanic population who did not specify their country of origin ("All Other Hispanics").[106]

Figure 5
Hispanic- or Latino-Origin Population by Major Subgroups, 2010



Source: Ennis, S. R., Rios-Vargas, M., & Albert, N. G. (2011, May). The Hispanic population: 2010. *2010 Census Brief* (C2010BR-04), p. 3. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf

The U.S. population will be considerably more racially and ethnically diverse by 2060, according to projections by the U.S. Census Bureau. This is in large part driven by Hispanic growth and immigration. The Hispanic population is projected to more than double, from 53.3 million in 2012 to 128.8 million in 2060. Consequently, in 50 years, nearly one in three U.S. residents would be Hispanic, up from about one in six today,[3] and Hispanics would be the largest group of net international migrants to the United States, increasing to nearly half a million net migrants in 2060.[110]

Reasons for Latino immigration have varied by subpopulations. In addition to the history of Spaniards and Mexicans in what is now the Southwestern United States, Mexican immigration to the United States results from several factors—the proximity of Mexico to the United States, the long shared border between the two countries, and the economic disparities between the two nations.[111] Since Puerto Rico is a U.S. commonwealth and its residents are U.S. citizens,

Table 6
Hispanic- or Latino-Origin Population by Detailed Subgroups, 2010

Subgroup	Number*	Percent
Mexican	31,798,258	63.0
Puerto Rican	4,623,716	9.2
Cuban	1,785,547	3.5
Other Hispanic or Latino	12,270,073	24.3
Dominican (Dominican Republic)	1,414,703	2.8
Central American (excludes Mexican)	3,998,280	7.9
Costa Rican	126,418	0.3
Guatemalan	1,044,209	2.1
Honduran	633,401	1.3
Nicaraguan	348,202	0.7
Panamanian	165,456	0.3
Salvadoran	1,648,968	3.3
Other Central American	31,626	0.1
South American	2,769,434	5.5
Argentinian	224,952	0.4
Bolivian	99,210	0.2
Chilean	126,810	0.3
Colombian	908,734	1.8
Ecuadorian	564,631	1.1
Paraguayan	20,023	*
Peruvian	531,358	1.1
Uruguayan	56,884	0.1
Venezuelan	215,023	0.4
Other South American	21,809	*
Spaniard	635,253	1.3
All other Hispanic or Latino	3,452,403	6.8
Total	**50,477,594**	**100.0**

*Percent rounds to 0.0.

Source: Ennis, S. R., Rios-Vargas, M., & Albert, N. G. (2011, May). The Hispanic population: 2010. *2010 Census Brief* (C2010BR-04), p. 3. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf

many Puerto Ricans move to the U.S. mainland, either temporarily or permanently, to pursue opportunities lacking in their homeland. Although immigration from Cuba to the United States through normal channels has been limited since 1959, when Fidel Castro came to power, since then Cubans have immigrated to the United States in several waves, primarily under special humanitarian provisions of law.[112] The earliest waves in the 1960s consisted of better educated and middle-class newcomers, while later waves were less uniformly so. Central and South American Latino immigrants have come to the United States primarily as the result of civil war, poverty, and political oppression. Mexican and Central American immigrants generally have less education than both other foreign-born populations in the United States and the native-born population.[113]

In 2011, more than one-third (36.2 percent) of all Hispanics living in the United States were foreign born.[114] Foreign-born women have a higher fertility rate than do native women. In the 12 months prior to being surveyed in 2010, about 75 of every 1,000 Latin America–born women ages 15 to 50 years had given birth, compared with about 52 of every 1,000 native women ages 15 to 50 years.[115]

In 2010, most of the nation's Hispanic population was urban, with 94 percent living in urban areas and 47 percent living in the central cities of metropolitan areas.[116] Nearly 38 million Latinos, or 75 percent of Latinos in the United States, reside in eight states (California, Texas, Florida, New York, Illinois, Arizona, New Jersey, and Colorado),[106] with the largest numbers in five cities—New York, Los Angeles, Houston, San Antonio, and Chicago.[106] The 10 cities in which Hispanics constitute the largest percentages of the population are in California, Florida, and Texas. The South (36 percent) and the West (41 percent) combined are home to more than three-fourths of all Hispanics. In addition, Latinos accounted for 29 percent of the population in the West, the only region in which Hispanics exceeded the national level of 16 percent.[106]

Many of the Hispanics in the West live in California, where this population has grown rapidly, increasing by 70 percent between 1970 and 2000[117] and by 28 percent between 2000 and 2010.[106] In 2010, the 14 million Hispanics in California accounted for 28 percent of the Hispanic population in the United States.[106] In addition, California was home to 36 percent of the U.S. population of Mexican descent

Table 7
Ten Places With the Largest Percentages of Hispanics or Latinos, 2010

Place	Total Population	Hispanic or Latino Population	
	Number	Rank	Percent of the Total Population by Place
East Los Angeles, CA	126,496	1	97.1
Laredo, TX	236,091	2	95.6
Hialeah, FL	224,669	3	94.7
Brownsville, TX	175,023	4	93.2
McAllen, TX	129,877	5	84.6
El Paso, TX	649,121	6	80.7
Santa Ana, CA	324,528	7	78.2
Salinas, CA	150,441	8	75.0
Oxnard, CA	197,899	9	73.5
Downey, CA	111,772	10	70.7

Source: Ennis, S. R., Rios-Vargas, M., & Albert, N. G. (2011, May). The Hispanic population: 2010. *2010 Census Brief* (C2010BR-04), p. 11. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf

and 28 percent of the Central American population in the United States.[118] According to a January 2013 projection by the California Department of Finance, the Hispanic population in the state is expected to equal the white non-Hispanic population by mid-2013, and by early 2014, Hispanics would become a plurality of California's population for the first time since California became a state. By 2060, nearly half (48 percent) of all Californians are projected to be Latino.[119]

The Hispanic population in the United States is diverse by many measures. Latinos can be of any race.[120] Thus, the population ranges from dark skinned to light skinned and includes all the shades in between; Latinos include people who are admixtures with Indians, blacks, whites, and Asians.[121] Hispanics also include people from Spanish-speaking countries (such as certain parts of El Salvador and various regions of Mexico) but whose primary language is not Spanish.[122] The Hispanic population includes farmworkers—the laborers in this nation with a lower life expectancy and higher rates of death than the general population from hypertension, injuries, tuberculosis, respiratory diseases, and reproductive disorders.[123,124] Although farmworkers have a lower overall cancer incidence than the general population (likely due to lower smoking rates), they have higher rates of leukemia and of brain, cervical, skin, and prostate cancer than does the general population, likely due to exposure to pesticides and overexposure to the sun.[124,125,126]

Seven of every eight migrant farmworkers (88 percent) self-identify as Hispanics. Farmworkers frequently lack both health insurance and regular health care, two factors that are associated with an increased incidence of chronic illness and disease.[123,125] Many Hispanic farmworkers live in *colonias*, unincorporated areas within 150 miles of the U.S.-Mexico border, often without basic services such as septic tanks, sewers, and running water.[127]

Although the median age for the Hispanic population is 27 years (compared with a median age of 37 years for the entire U.S. population in 2010),[128] significant differences in age distribution exist among Latino subpopulations. While nearly two-fifths (38 percent) of Mexicans and more than a third of Puerto Ricans (34 percent) are younger than age 18 years, only a fifth (20 percent) of Cubans are in this age

group. A similar percentage of Cubans (17 percent) is older than 65 years, compared with 5 percent of Mexicans and 8 percent of Puerto Ricans in this age group.[129] In 2010, the median age was 25 years for Mexicans, 27 years for Puerto Ricans, and 40 years for Cubans.[130]

Among Hispanic subpopulations, Mexican Americans appear to enjoy better health than would be predicted, given their socioeconomic status and the fact that they have low utilization rates for health care services for both physical and mental conditions.[131] For example, in the population age 20 years and older, Mexican American women (28 percent) are less likely than black non-Hispanic women (44 percent)—and equally likely as white non-Hispanic women (28 percent)—to have hypertension.[132] Research on hypertension by Hispanic subgroup finds considerable variation between men and women. One study found that Mexican, Mexican American, Central American, and South American women all had greater odds of having hypertension than did their male counterparts.[133] Furthermore, an examination of hypertension-related mortality data revealed variation in the death rates among Hispanic subgroups, with Puerto Rican adults exhibiting a greater rate of mortality than both Mexican American and Cuban adults.[134]

Recent research among U.S. adults on mortality rates from all causes illustrates the need to disaggregate data for Hispanic subgroups to rigorously examine the so-called Hispanic paradox. The apparent paradox is that, despite lower income and educational attainment and very poor access to health care, Latino health outcomes are often the same as or better than those of white non-Hispanics.[135] In one piece of research, the Hispanic paradox of lower mortality rates for Hispanic subgroups than for non-Hispanic whites was found to exist for Hispanic women only.[136] Furthermore, this lower mortality risk was found to vary by nativity status. In particular, the following groups were found to have lower death rates than their white non-Hispanic female counterparts: Mexican American and Central and South American women ages 25 to 44 years, Cuban women ages 45 to 64 years, and Puerto Rican and Mexican American women age 65 years and older. In addition, all of the following Hispanic subgroups of women had lower observed mortality risk than their white non-Hispanic counterparts, when examined by nativity status: U.S.-born Mexican Americans both ages 25 to 44 years and age years 65 and older, island- or foreign-born Cubans and Other Hispanics ages 45 to 64 years, and island- or foreign-born Puerto Ricans age 65 years and older. These findings suggest that the Hispanic paradox may not be a static phenomenon and may instead be evolving as the Hispanic population in the United States increases in size and diversity.[136]

The socioeconomic and employment conditions of Hispanics, as of all populations in the United States, influence their access to health insurance and thereby to health care. In 1993, the Hispanic poverty rate was 30.6 percent, falling to 21.4 percent in 2001 before inching up to 25.3 percent in 2011.[137] Nearly one-quarter (24.3 percent) of all Hispanic families lived in poverty, as did 20.8 percent of all Latino married-couple families with related children younger than 18 years.[137] In addition, in 2011, more than one-quarter (27.7 percent) of Hispanic females had incomes below the federal poverty line.[137]

Rates of unemployment and labor force participation account for the poverty levels of Hispanics in part. In March 2013, the seasonally adjusted unemployment rate for the Hispanic population age 16 years and older (both males and females) of 9.2 percent was 37 percent higher than the unemployment rate for the white population of 6.7 percent. The unemployment rate was 8.2 percent for Latino males 20 years and older and 9.3 percent for Latino females 20 years and older. (The only unemployment rates available for Hispanic males and Hispanic females separately are not seasonally adjusted and are available only for people age 20 years and older.) The 65 percent share of the Hispanic population in the labor force reflects both the 81 percent share for Hispanic males (that exceeds the labor force participation rates for both white males—73 percent—and for black males—68 percent) and the 58 percent share for Hispanic females (which equals the 58 percent labor force participation rate for white females but falls short of the 61 percent rate for black females).[138]

As with other measures, for Hispanics, there is variation by subgroup in unemployment and labor force participation rates. In 2011, unemployment rates for Mexicans (11.6 percent) and Cubans (11.2 percent) were near the Latino average of 11.5 percent, while the rate for Puerto Ricans (14.1 percent) was greater than this average. The rate for populations from Central and South America (10.4 percent) was below the Latino average.[139]

Hispanic family households also are more likely than non-Hispanic white family households to be headed by females. Furthermore, these female-headed households are more likely than other types of households to have incomes below the federal poverty level. Although 23 percent of all non-Hispanic white female–headed families had incomes below the poverty level in 2011, the corresponding share of Latino female–headed families was 41 percent.[140]

When Hispanic women are employed, they tend to hold jobs of low status and with low pay. Hispanics, along with African Americans, are more likely than non-Hispanic whites to be among the working poor. More than 15 percent of all Hispanics and 16 percent of Hispanic women reported working full-time but earning poverty-level wages, as did nearly 15 percent of all blacks and nearly 18 percent of black females. Only 7 percent of all non-Hispanic whites and nearly 8 percent of non-Hispanic white women reported working for poverty-level wages in 2011.[141]

Hispanics are more than three times as likely as whites (non-Hispanic) and nearly twice as likely as African Americans to be full-time workers but to lack health insurance (38 percent for Hispanics versus 12 percent for non-Hispanic whites and 21 percent for blacks).[142] Thirty percent of the Hispanic population was not covered by health insurance for the entire year of 2011, with full-time and part-time workers accounting for 57 percent of the uninsured.[142] This share incorporates the 33 percent of Mexican Americans, the 32 percent of Other Hispanics, the 28 percent of Cubans, and the 16 percent of Puerto Ricans who were younger than 65 years and uninsured in 2011.[132] This lack of insurance is due in part to the fact that Hispanics are more likely than non-Hispanics to be employed in industries and occupations that do not provide health benefits.[143,144]

Although some Latinos have government-funded health insurance coverage, Medicaid coverage of people with comparably low incomes varies by state of residence, as do eligibility requirements and administrative practices under this health insurance program for the poor. Overall, however, 30 percent of Hispanics younger than 65 years are enrolled in Medicaid. This figure incorporates the 20 percent of Cubans, the 28 percent of Other Hispanics, the 31 percent of Mexican Americans, and the 33 percent of Puerto Ricans who are covered by Medicaid.[132] For example, Hispanic residents of New York and California are more likely to be enrolled in Medicaid than are equally poor Hispanics in either Florida or Texas,[145] although these four states are among the eight states in which 75 percent of U.S. Latinos reside.[106] Beyond the likely lack of employer-sponsored health insurance, the working poor face double jeopardy with respect to health care because they cannot afford to pay costly medical bills out of pocket and because they do not qualify for federal programs such as Medicaid. Some of the Hispanic working poor have the added disadvantage of lacking U.S. citizenship and thus being ineligible for federal health assistance programs, even if their incomes are low enough.[146]

Along with socioeconomic status, cultural context or acculturation—the process of psychological and behavioral change individuals undergo as a consequence of long-term contact with another culture—plays a major role in the incidence of health conditions and access to health care among Hispanic populations. One aspect of acculturation for the Hispanic American is encountering discrimination, prejudice, and exclusion (based either on language or skin color), perhaps for the first time, and incorporating into her or his identity a newly acquired "minority" status.[147] Racial identification among Latinos is likely to be influenced by personal reactions to differences between the racial hierarchies and construction of race in the United States and in their homelands.[148] It also may be shaped by characteristics of the immigrant population, such as age at entry to the United States, socioeconomic status in the country of origin, and ability to "pass" or be accepted as white in the United States.[148] For Dominicans and Puerto Ricans, some of whom self-identify or are identified by others as black, this identification has been associated with increased experiences of racial discrimination that may in turn affect both social mobility and health status.[133,149]

Some less acculturated Hispanic immigrants have a significantly lower likelihood of health problems (both physical and mental) and, therefore, less need for outpatient services. One example is the incidence of low-birth-weight infants (which is highly correlated with the infant mortality rate) among less acculturated first-generation Mexican American women. Less acculturated Hispanic women have a lower incidence of low-birth-weight infants than both white non-Hispanic women and more highly acculturated Hispanic women.[150] Comparing infant mortality prevalence among Puerto Ricans on the mainland and in the Commonwealth of Puerto Rico illustrates

this finding. One recent study found that infant mortality is substantially lower among recent migrants to the U.S. mainland than it is among nonmigrant women in Puerto Rico. This finding and other research suggest not only that selective migration of healthier populations may be an operative factor in birth outcomes for Latinas but also that the qualities associated with better birth outcomes of infants born to Puerto Rican migrants to the United States are eroded once the migrant mothers have lived on the U.S. mainland for a substantial period of time.[151]

More acculturated Hispanics (as reflected by greater use and skill with the English language and greater involvement with the mainstream American culture) would be expected to adopt behaviors and have health outcomes similar to nonimmigrant Americans. Research findings on this hypothesis are mixed. Hispanics with a greater degree of acculturation are more likely to engage in behaviors that can have negative effects on health (such as substance abuse and unhealthy dietary practices). Substance use and unprotected heterosexual intercourse among more acculturated Hispanic men and women are key risk factors for HIV infection and AIDS, an association that seems to be strongest among Puerto Ricans.[152,153] More acculturated Hispanics are, however, also more likely to make use of health care (such as preventive screenings) and to engage in leisure-time physical activity, two factors that could mitigate the effect of chronic diseases.[154,155]

Regardless of degree of acculturation, however, Latinos are more likely to have diabetes than the adult white non-Hispanic population in the United States. Among people age 20 years and older, around 7 percent of whites (non-Hispanic) but nearly 12 percent of Latinos had diagnosed diabetes. For this group of adults, the risk of diagnosed diabetes was 66 percent higher among Hispanics/Latinos than among whites (non-Hispanic). The risk of diagnosed diabetes among Cuban Americans and Central and South Americans roughly equaled that among white non-Hispanic adults, although it was 94 percent higher for Puerto Ricans and 87 percent higher for Mexican Americans.[156] The prevalence of diabetes among Mexican American women is twice the rate among white women.[157]

Other aspects of culture that can influence health are religion, folk healing, and "familism," or family mores. Cultural mores that dictate that Hispanics should first try home remedies, seek the advice of family and friends, or engage folk healers before getting professional health care also can build delays into the care-seeking process that may be costly in terms of either morbidity or mortality.[158] Even while using professional biomedical health care, Hispanics may continue to use traditional medicines or alternative therapies as a complement, often without disclosing their use to their professional health care providers, a pattern that could have unforeseen negative consequences.[135]

Degree of acculturation also influences the spread of HIV infection and AIDS among Hispanics. In traditional Hispanic cultures, men and women have distinct gender roles, and women are not supposed to have advanced knowledge about sex and sexuality (the *marianista* tradition).[159] In the home, females are provided less information and education about sexuality than are males. Language barriers can prevent women from being educated elsewhere. Thus, women may not know the risk factors for HIV/AIDS and may engage in risky behaviors unknowingly. However, even if they know the risk factors for HIV/AIDS and want to engage in safer sexual behaviors, they could be considered immoral and promiscuous if they discuss condom use with their partners. This concern may lead some women to forgo condom use rather than risk embarrassment and stigma. In addition, the *machismo* tradition among men may contribute to lower levels of self-esteem and feelings of disempowerment among Hispanic females and discourage them from attempting to protect themselves and from seeking care for HIV infection or AIDS.[152,159]

Blacks or African Americans

The black population of the United States consists primarily of U.S.-born African Americans, although sizable numbers of African and African Caribbean immigrants have become part of this group in recent years. The African ancestors of the group known today as African Americans were brought to the shores of what is now the United States as slaves by Europeans beginning in 1619. In 2010, the Census Bureau counted 38.9 million people in the United States who identified themselves as black or African American only (12.6 percent of the total population) and 42.0 million people who identified as black or African American in addition to one or more other racial affiliations (13.6 percent of the total population).[160]

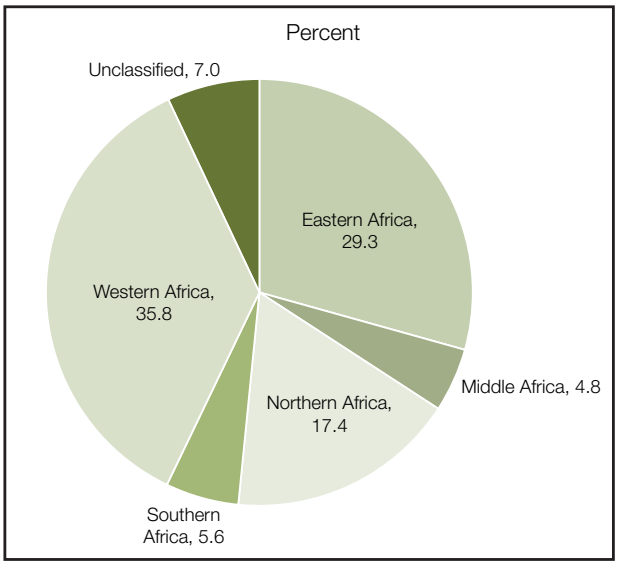
In the 2000 census, nearly 34.7 million people (12.3 percent of the total population) identified themselves as black or African American only, and 36.4 million people (12.9 percent of the total population) marked black or African American as one of several racial affiliations.[161] Between 2000 and 2010, the black population increased at a faster rate than did the total U.S. population, which grew by 9.7 percent during this period. In comparison, the black-alone population grew by 12 percent, and the black-alone or black-in-combination population grew by 15 percent. However, both groups of blacks grew at a slower rate than did most other major racial and ethnic groups in the country.[160] More than half of the black-alone population (20.4 million) in 2010 were females.[162]

Many who marked the box for black or African American on the 2010 census form also reported Caribbean, Indian, and/or European ancestry. Among the 3.1 million people who reported black and at least one other race in 2010, the most common combination was African American and white (59 percent). Nearly 9 percent reported black and American Indian/Alaska Native, and 7.5 percent reported black, white, and American Indian/Alaska Native.[160]

Heterogeneity within the U.S. black population also results from contemporary immigration from the Caribbean basin and Africa. In 2010, more than 13 percent of all immigrants to the United States were from Africa and the Caribbean combined, with 4 percent coming from Africa and 9.3 percent coming from the Caribbean. A sizable proportion of the immigrants from both areas were of African descent.[115] The following factors have provided the impetus for much of the migration of members of the African diaspora to the United States: drought, famine, civil and regional wars, and debt repayment burdens that divert resources from infrastructure development and much-needed social services.

Approximately 8.5 percent of black Americans are foreign born,[163] mainly French-speaking Haitians and other non-Spanish-speaking people from the Caribbean region. These include residents from Dutch-speaking islands such as Aruba and the Netherlands Antilles and English-speaking people from former British colonies in the Caribbean Sea and from the mainland territories of Belize and Guyana. The 1990 census estimated that there were almost 1 million Americans of English-speaking West Indian or

Figure 6
Region of Birth Among African-Born Immigrants, 2011



Source: U.S. Department of Commerce, Bureau of the Census. (n.d.). American Community Survey 2011. Table B05006. Retrieved from http://factfinder2.census.gov

Caribbean ancestry, almost half a million of sub-Saharan African ancestry, and 300,000 of Haitian ancestry. In 2000, there were nearly 1 million foreign-born Africans (881,300) alone in the United States.[164] By 2011, nearly 1.7 million U.S. residents were born in Africa, of whom nearly three of four (74 percent) were black.[165] Foreign-born African immigrants to the United States come primarily from Western Africa (36 percent) but arrive from throughout the continent as well (29 percent from Eastern Africa, 17 percent from Northern Africa, 6 percent from Southern Africa, 5 percent from Middle Africa, plus 7 percent unclassified).[166]

Although the numbers of immigrants are small relative to the entire U.S. black population, in some places, immigrants of African descent and their progeny constitute a substantial proportion of the population. Where this is true, marked differences in acculturation exist among black women and contribute to the diversity of their health outcomes. One example is provided by the findings from a study of human papillomavirus (HPV) vaccination intentions among Haitian and African American women served by an urban academic medical center and its affiliated community health center in

Boston.[167] Within the population of black women in the United States, Haitian women are more likely than U.S.-born black women to be diagnosed with advanced-stage invasive cervical cancer, which is caused by HPV. Although a majority of both the Haitian women (75 percent) and the African American women (63 percent) in the study intended to vaccinate their daughters against HPV, only 47 percent of black women and 31 percent of Haitian women did so. More so than the black mothers, the Haitian mothers reported feeling uncomfortable vaccinating against a sexually transmitted virus because they felt their daughters should not be having sex.

Another example of differences in health outcomes associated with acculturation is from a study of the risk of giving birth to a low-weight infant among black native-born and foreign-born mothers in New York City.[168] For U.S.-born black women living in segregated areas—with a high degree of racial isolation—this fact is associated with a higher low-birth-weight risk for their infants. Although the same association was evident for foreign-born black mothers, differences in the risk of giving birth to a low-weight infant were more strongly associated with individual factors such as country of birth. This finding suggests that living in a segregated area has a protective effect on the health of black foreign-born women as a result of these women living in areas with a high density of people of the same ethnicity.

Black Americans reside in all 50 states and the District of Columbia. They are a largely urban population, with more than 91 percent living in urban areas in 2010.[116] Despite their urbanity and their wider distribution among the states than other racial/ethnic groups, 53 percent of all black Americans counted in the 2010 census lived in 13 Southern states—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.[160] Seven of the 10 places with the largest percentages of African Americans are located in the South.[160] More than 20 percent of all census respondents in the South were black, in contrast to 13 percent in the Northeast, 11 percent in the Midwest, and 6 percent in the West.[160] The black population represented

Table 8
Ten Places With the Largest Percentages of Blacks or African Americans, 2010

Place	Total Population	Black or African American Alone or in Combination	
	Number	Rank	Percentage of the Total Population by Place
Detroit, MI	713,777	1	84.3
Jackson, MS	173,514	2	80.1
Miami Gardens, FL	107,167	3	77.9
Birmingham, AL	212,237	4	74.0
Baltimore, MD	620,961	5	65.1
Memphis, TN	646,889	6	64.1
New Orleans, LA	343,829	7	61.2
Flint, MI	102,434	8	59.5
Montgomery, AL	205,764	9	57.4
Savannah, GA	136,286	10	56.7

Source: Rastogi, S., Johnson, T. D., Hoeffel, E. M., & Drewery, M. P. (2011, September). The black population: 2010. *2010 Census Brief* (C2010BR-06), p. 15. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-06.pdf

more than 50 percent of the total population in the District of Columbia and more than 25 percent of the population in six Southern states: 38 percent in Mississippi, 33 percent in Louisiana, 32 percent in Georgia, 31 percent in Maryland, 29 percent in South Carolina, and 27 percent in Alabama.[160] In addition, according to the 2010 census, the largest increases of the black population occurred in the South and the West.[160]

Despite their disproportionate representation in Southern states (as evident from the fact that 6 of the 10 states with the largest numbers of African Americans were Southern), several states with large numbers of African Americans were not in the South—California, Illinois, New York, and Ohio. Based on totals for the population that reported black or African American either alone or in combination with another population, 3.3 million African Americans resided in New York state, 2.7 million in California, 2.0 million in Illinois, and 1.5 million in Ohio in 2010.[160]

Differences in the health of blacks and whites are many and varied. Blacks have more undetected diseases, higher disease and illness rates (from infectious conditions such as tuberculosis and sexually transmitted diseases), more chronic conditions (such as hypertension and diabetes), and shorter life expectancy than do whites.[132,169,170,171] Thus, African Americans are sicker during their lifetimes and younger when they die than any other racial/ethnic group in the United States, except for American Indians/Alaska Natives.[21,132] Morbidity and mortality rates for African Americans from many conditions (cancer, HIV/AIDS, pneumonia, and homicide) exceed those for whites.[38,132] These findings exist even though black females are generally less likely than white females to report risk behaviors such as smoking cigarettes, consuming alcohol, or using other substances.[35]

Experts have sought explanations for racial differences in health outcomes, and many contributing factors have been identified.[172] Although the interactive mechanisms have not been clearly specified, links have been demonstrated between race, on one hand, and blood pressure, mental health, and general physical health status, on the other.[173,174] Many factors have been proposed to explain the health disparities between African Americans and members of other racial/ethnic groups. Under the ecological model of African American health, factors contributing to health disparities are viewed to fall within six major health determinant or risk factor domains—genetic endowment, predisposing characteristics, social environment (including racism and racial discrimination), physical environment, health-influencing behavior, and health care system characteristics.[175] These factors are discussed throughout the text that follows.

Evidence about a genetic basis for the persistent differences in health and health outcomes among U.S. subpopulations remains suggestive, even in the current era with data available from the human genome sequencing project.[176,177,178] For example, the murkiness of race as a concept to define black Americans, who range from fair skinned and blue eyed with straight hair to dark skinned with dark eyes and coarse hair, does not allow us to provide purely genetic explanations of the health differences between blacks and whites. The fact that many genetically related populations in Africa and the Caribbean display much lower rates of cardiovascular disease, hypertension, and low-birth-weight infants and higher life expectancies than do African Americans also casts doubt on purely genetic explanations for racial health differences.[179] Instead of looking at population-related genetic differences, others link the racial differences in health to black subpopulations that are exposed to multiple risks—such as intravenous drug users and those living and working in hazardous environments—and to exposure to factors such as stress, discrimination, and racism.

One long-considered hypothesis to explain the prevalence of hypertension among African Americans is "John Henryism."[180,181] John Henryism is defined as the strong behavioral predisposition to engage in high-effort coping with demanding psychosocial stressors and could compromise health among those for whom environmental demands exceed personal coping resources, as measured by low socioeconomic status.[182] Several studies have found support for the John Henryism hypothesis among African Americans.[181,183]

Researchers studying the prevalence of hypertension among blacks have also found that it varies with skin color, vitamin D status, and psychosocial stress.[184] A skin-color gradient has long been observed among African Americans and other African-diaspora populations.[173] In other words, lighter-pigmented blacks often have a lower prevalence of hypertension than do darker-skinned blacks, and pigment is related

to the degree of admixture with whites, whose overall prevalence of hypertension is lower than that of African Americans. However, researchers have not measured actual genetic differences between lighter- and darker-pigmented blacks—instead, skin color differences were used as a proxy for presumed genetic differences. Research examining the interaction between income and skin color to influence the blood pressure of African Americans has found that there is a protective gradient of income with respect to systolic blood pressure (the numerator of the blood pressure fraction that is ideally below 120 mm Hg) among lighter-pigmented African Americans but not among darker-pigmented African Americans. In other words, as income increases among lighter-skinned African Americans, systolic blood pressure decreases. Among darker-skinned African Americans, as income increases, so does systolic blood pressure.[173] Another study found that darker-skinned individuals who identified with higher social class status were the most likely to have elevated blood pressures. Individuals with both light skin and high social status and with both dark skin and low social status reported lower blood pressure.[185]

Yet another piece of research has identified a significant inverse relationship between median housing value and a self-report of physician-diagnosed hypertension.[186] In other words, these researchers found that hypertension rates were lower among black women who lived in housing with higher median value. This relationship was evident even among black women with higher levels of income and education, and it suggests that health and disease are influenced not only by the characteristics of individuals but also by the conditions under which people live.

Recent research about the smoking-related risk of lung cancer, however, provides support for the role of genetics in the health of African Americans. The risk of lung cancer associated with cigarette smoking is significantly greater for African American women (and men) than for white women (and men).[187] The same is true for mortality from lung cancer.[188] Variation in the metabolism of nicotine by blacks and whites has been hypothesized to underlie differences in smoking behavior (such as the depth and frequency of inhalation) and, thus, in the intake of carcinogens.[188]

Earlier research on the presence of cotinine, a metabolite of nicotine, in the bloodstreams of African Americans and white Americans suggests that (after controlling for the number of cigarettes smoked daily) African Americans retain more cotinine than do whites. Research has also shown that smoking menthol cigarettes is linked to retaining higher levels of cotinine, and African Americans are more likely than are whites to smoke menthol cigarettes.[189] Although this and other findings suggest the existence of a genetic factor among African Americans that may predispose them to certain conditions, environmental factors also play a role in health behaviors and, thus, health outcomes.[179] Research suggests that sociostructural factors (such as perception of racially discriminatory treatment) are also relevant to the onset of unhealthful behaviors such as cigarette smoking.[190]

More than a fourth (28 percent) of all Americans who reported their race as black alone lived in poverty in 2011, as did a comparable proportion of black women (29 percent). Almost two in five blacks younger than age 18 years (39 percent) and nearly one in six blacks age 65 years and older (17 percent) reported incomes below the poverty level.[191] A majority (72 percent) of the more than 2.3 million black families with incomes below the federal poverty level were maintained by women with no husbands present.[140] Single-parent, female-headed households—45 percent of all black family households in 2011[140]—were mired in poverty to a greater degree than was the entire black population. More than two-fifths (42 percent) of all people in black female–headed families, but only 11 percent of all people in married-couple black families, had incomes below the poverty level in 2011.[192] Median income for all black households in 2011 was $32,229, with median income for married-couple black families at $64,875. For black female–headed family households, 2011 median income was $26,488.[193]

More than half of the black workforce (54 percent) is female, with many of these workers earning poverty-level wages. Of the 9.3 million black women who were in the labor force at least 27 weeks during 2011, one-sixth (16 percent) lived in poverty. More than one-fourth (more than 27 percent) of all young black female members of the labor force ages 16 to 24 years had income below the federal poverty level.[194]

Inadequate income carries over into other aspects of daily life that impinge on health. These include living in inadequate housing (which may increase exposure to communicable diseases, lead poisoning, and other harmful environmental agents), improper

nutrition, chronic stress from constantly struggling to make ends meet with inadequate resources, dangerous jobs, violence, and reduced access to medical care (which leads to the receipt of little or no preventive medical care).[195,196] The relegation of African Americans to segregated neighborhoods, often with concentrated poverty in many urban areas, is also associated with limited access to healthy food options.[197] Malnutrition in young black girls may later result in low-birth-weight babies and high infant mortality rates when these girls become mothers.

Low-weight births are related to the intergenerational effects of the growth and development of a mother from her prebirth to childhood, which may in turn influence the intrauterine growth of her child. Studies have shown that the birth weight and early health of a mother can be greater predictors of subsequent low-weight births than is socioeconomic status or early prenatal care.[198] Mothers who themselves had low weight at birth are more likely to give birth to low-weight infants. Even achieving higher socioeconomic status intergenerationally does not completely mitigate that effect, so that a black middle-class mother may be giving birth to an infant whose health is markedly determined by the poverty of not only the mother but also the mother's mother.[199]

Although socioeconomic status has been linked to differences in birth outcomes, socioeconomic status does not fully account for the disparity in infant mortality rates between black and white women. Black women of higher socioeconomic status have been found to have higher infant mortality rates than do white women of lower socioeconomic status.[200] Mortality rates for infants born to black mothers with 13 or more years of education (in 2005) were nearly three times the rates among infants born to white non-Hispanic mothers with 13 or more years of education.[201] This excess mortality was due primarily to higher rates of death associated with premature delivery and low birth weights of black babies.[202] An additional difference between pregnancy outcomes for black and white women is the fact that as black women age from adolescence to the early 40s, they are more likely to give birth to infants with either low birth weight or very low birth weight. This "weathering" effect is not noted in white women and may be evidence of the physiological response by black women to cumulative stressors such as racism, discrimination, and socioeconomic disadvantage.[200,203]

Although black women are more likely than white women to delay receiving prenatal care and are less likely to receive prenatal care at all, differences in the use of prenatal care and other differences during pregnancy do not fully account for disparities between black and white women in the incidence of births of infants with low and very low weights.[200] Qualitative differences in prenatal care seem to be relevant as well. For example, poor glycemic control in mothers with diabetes has been linked to suboptimal fetal development and may result in greater adult susceptibility to insulin resistance and diabetes for the infant. The failure to receive ancillary services—such as childbirth education classes, mental health or periodontal services, or breastfeeding support—also may lessen the quality of prenatal care received by black women.[204] Other factors such as the frequency of short intervals between pregnancies and stresses associated with the relationship with the father also have been associated with the greater incidence of low-weight infants born to black women.[204] The presence of a significant other in the delivery room has been associated with a reduced likelihood of the birth of a very low-weight infant to an African American woman.[205] However, young age, high numbers of previous pregnancies, and lower education levels are factors that may confound this disparity, for which a complete explanation is yet to be provided.

Hazards in their living environments also detract from the health of black Americans. African American mothers are more likely than white mothers to live in areas with high levels of air pollution (measured by levels of the pollutants ozone, carbon monoxide, nitrogen dioxide, and sulfur dioxide), regardless of educational status, age, region of the country, or marital status.[206] Exposure to environmental lead (via air, water, soil/dust, and food) and the prevalence of elevated lead levels in the blood (greater than 10 g/dL) also are much more common among non-Hispanic blacks than non-Hispanic whites (although about equally as common as among Mexican Americans). This holds true for black adults as well as for black children, and higher blood levels of lead were found to be associated with higher blood pressure levels among blacks.[207,208]

Exposure to hazards in the work and living environments suggests that black Americans might have a greater need than other groups for preventive health care. In fact, black women receive Pap tests and

mammograms at about the same or higher frequencies than do white women and women of other racial/ethnic groups. African American women were more likely than were women of all other racial/ethnic groups to report a recent Pap smear in 2010.[132] They were more likely than Asian, Hispanic, and white women to report recent mammograms but less likely than American Indian or Alaska Native women to report recent mammograms.[132] African American women of different ages, however, vary in their likelihood of getting preventive screenings. For example, also in 2010, nearly three-fourths (74 percent) of African American non-Hispanic women ages 50 to 64 years reported having had a mammogram in the past 2 years, compared with only 61 percent of their counterparts age 65 years and older.[132]

Despite this similar use of preventive screenings, if diagnosed with breast cancer, African American women often face a worse prognosis than do white women.[209] Significantly fewer black than white women survive 5 years after diagnosis with breast cancer (77 versus 91 percent, respectively, over the period 2001–2007).[132] Black patients with breast cancer tend to be diagnosed at a more advanced stage than either Hispanic or white patients with breast cancer.[210] Longer time to diagnosis of breast cancer, however, does not fully explain differences among racial and ethnic groups in the stage at diagnosis. A greater incidence of more aggressive tumors could result in a later stage at diagnosis and the poorer survival rates that make breast cancer a disease with lower incidence but higher mortality among black than white women. Several factors have been identified as barriers to diagnosis, care, and treatment, including poor access to health care services, lack of education and knowledge about cancer prevention and screening, mistrust of the health care system, fear and fatalism concerning treatment, and dealing with other competing priorities, such as food, shelter, and safety.[209]

Racial discrimination and racism have remained significant operative factors in the health and health care of blacks over time. As early as 1867, black spokespeople concluded that racism was a major contributor to the poor health of black Americans in two significant ways. First, "structural racism" creates barriers to getting access to adequate care, and, second, dealing with both structural barriers and racial insults may contribute to stress-related health problems such as pregnancy-induced hypertension among black women and long-term elevation of blood pressure levels.[211,212] Stress related to racism also may underlie the overeating[212] and resultant obesity common in black women and may be associated with the greater prevalence of both diabetes and hypertension among black women relative to white women.[213,214] While 5.4 percent of white females report diabetes, 9 percent of black females do so, for a prevalence among black women that is 1.66 times that among white women.[215] Similarly, among females age 20 years and older, more than two of five African American females (44 percent) but less than a third of white females (28 percent) report hypertension, a 1.5 times greater prevalence among black females.[132]

Another response to racism that affects the health of black women is the internalized rage of black men, which often is redirected as anger and violent behavior against black women. One study found that police-reported rates of intimate-partner violence were two to three times higher among black non-Hispanic women than among white non-Hispanic women.[216] During the 1980–2008 period, whites were 55.0 percent of intimate victims of homicide, and blacks were 42.7 percent of these victims, proportions that differ greatly from the 80 percent and 12 percent of the population accounted for by whites and blacks, respectively, over those years.[217] Homicide of intimates has constituted a larger proportion of all homicides among females (43 percent among homicides among black females and 44 percent among homicides among white females) than it is among homicides among males (around 5 percent among homicides among both white males and black males) over this same period.

Another statistic that may reflect the internalized rage of African American men directed at African American women is the rate of pregnancy-associated homicides. A pregnancy-associated homicide is a death by homicide that occurred during a pregnancy or in the first year postpartum. Using data from the National Violent Death Reporting System of the Centers for Disease Control and Prevention, for 2003 through 2007, a pregnancy-associated homicide rate of 2.9 deaths per 100,000 live births was calculated.[218] African American mothers accounted for 44.6 percent of pregnancy-associated homicides but only 17.7 percent of live births, a statistically significant difference. Pregnancy-associated intimate-partner homicides also were more common among African American females than were live births. African American mothers accounted for 37.3 percent of

pregnancy-associated intimate-partner homicides, in contrast to 17.7 percent of live births during the 2003–2007 period, again a statistically significant difference.

Differences between native-born African Americans and immigrants from the African diaspora further suggest the role of exposure to racism as an explanatory factor for health outcomes. Immigrant black couples, compared with native black couples, have a lower incidence of low-birth-weight babies. This is true even after controlling for educational attainment. The rate of low-birth-weight babies born to black immigrant women is lower than the rate among black native women for all educational levels (including fewer than 12 years of education, 12 years of education, 13–15 years of education, and 16 or more years of education). In fact, the rate of low-birth-weight babies born to black immigrant women with fewer than 12 years of education is lower than the rate of low-birth-weight babies born to native-born black women with 16 or more years of education. The incidence of low-birth-weight babies among immigrant blacks is similar to that among white couples.[219] Many black babies born in metropolitan areas with higher levels of residential segregation have higher rates of infant mortality than their counterparts born in less segregated areas, another suggestive finding that does not fully explain the differential incidence.[220]

Maternal mortality also differs significantly between black and white mothers. Black women face a higher risk of pregnancy-related mortality, regardless of age, marital status, or the timing of prenatal care initiation during their pregnancy.[221] In 2006–2007, black mothers were more than three times as likely to die from pregnancy complications as white mothers. The mortality rate due to pregnancy complications for black mothers was also more than twice the rate for either white mothers or mothers of other racial groups.[222]

As with breast cancer or heart disease, for example, the experience of confronting HIV infection (the human immunodeficiency virus that causes AIDS) and AIDS is different for most whites than for people of color and the poor in the United States. These differences result in part from the many socioeconomic and structural barriers faced on an ongoing basis by these groups.[223] In particular, delays in seeking medical care, differences in preexisting health, differences in resources and living environments, and differences in drugs administered as treatment are among the many factors that result in shorter survival times for blacks after diagnosis with AIDS. Eighty-eight percent of blacks survive for 12 months or more, compared with 90 percent of whites. The difference is greater for survival rates of 36 months or more—81 percent of blacks and 85 percent of whites survive 36 or more months after being diagnosed with AIDS.[224] During the 2005–2007 period, black non-Hispanic females accounted for 75.52 percent of all deaths due to HIV infection among females who were white, black, or Hispanic, in contrast to the 20 percent of deaths accounted for by white non-Hispanic females. This is an increase from the 59 percent of deaths due to HIV infection among black non-Hispanic females and the 33 percent of deaths among white non-Hispanic females during the 1993–1995 period.[225]

Women have represented a decreasing share of the cases of AIDS reported in the United States in recent years. During 2010, nearly one-fourth (25 percent) of all diagnosed cases of AIDS were reported among women, a somewhat smaller share than the more than 27 percent of all AIDS cases reported by women in 2007.[226] African American women, however, continued to account for the majority of cases in 2010 among women—5,422 cases compared with 1,275 cases reported among white women.[226] Sixty-six percent of all cases of AIDS reported among women during 2010 were among black women.[226] Consistent with their high incidence of the disease, African American women are more likely than other women to die from HIV disease. In 2008, HIV disease was among the leading causes of death for black women ages 15 to 54 years.[227]

A majority of black women (88 percent) who were infected in 2010 with HIV reported that heterosexual contact was the major cause of HIV infection, followed by injection drug use (12 percent). This pattern among causes of transmission is the same for women of all racial and ethnic groups, although white women and American Indian or Alaska Native women frequently reported injection drug use as a cause of HIV infection. In 2010, one-fourth of all cases of HIV infection reported among white and American Indian or Alaska Native women were attributed to injection drug use and 45 percent to heterosexual contact.[228]

In light of these facts, it is surprising that less than half (40 percent) of African Americans surveyed in 2004 were very concerned about becoming infected

with HIV. Twenty-four percent were not at all concerned about being infected. This lack of personal concern, however, coexisted with the findings that 63 percent of African American parents were very concerned about their children (age 21 years and younger) becoming infected with HIV. In addition, nearly three of five African Americans (57 percent) knew someone who had AIDS, had died of AIDS, or had tested positive for HIV infection.[229]

The prevalence of conspiracy beliefs and the lack of trust in the ability and will of the government to stop the epidemic are key factors in the rapid transmission of and the treatment disparities with respect to HIV/AIDS in the African American community. Some of this distrust is related to the legacy of slavery and discrimination toward blacks in the United States, including the infamous Tuskegee syphilis experiment.[229] Although surveys about conspiracy beliefs are more likely to examine the perspectives among African American men,[230] research with female subjects has revealed similar distrust and greater belief among African American women than among women of other racial/ethnic groups in, for example, the use of AIDS as a form of genocide to kill minority populations.[231]

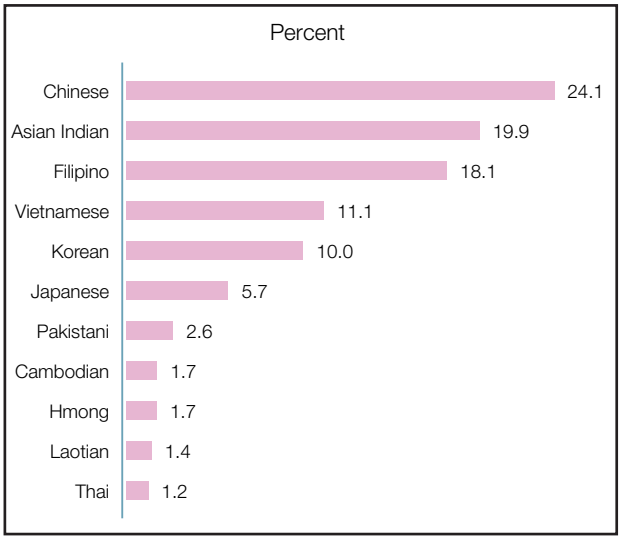
A complex set of historical and contemporary factors (including racism, poverty, and segregation) interacts to create the life experiences and exposures of black or African Americans. These exposures are often to pollutants that make them ill and to stresses that do the same. Although the greatest amount of health-related research and data about any population of color exists for African Americans, being the most studied racial/ethnic population has not translated into their being the healthiest, despite the nearly 400 years of Africans (and their descendants) in the United States.

Asian Americans

Although health issues for Asian Americans and Pacific Islander Americans often are analyzed jointly, in this data book, whenever possible, the groups are separated. In accordance with OMB Directive 15, factors related to the health of Pacific Islanders are discussed along with those for Native Hawaiians. (See earlier section "Native Hawaiians or Other Pacific Islanders.") Asian populations are discussed together here. An effort has been made throughout to disaggregate data about Asians from data about Pacific Islanders and to present findings for the groups separately. Aggregate statistics for Asians and Pacific Islanders are provided, however, when they are the only or the best data available.

Asian Americans have immigrated to the United States from more than 20 countries, such as China, India, Japan, the Philippines, Korea, Laos, Cambodia, Vietnam, and Thailand. Speaking more than 100 different languages, they and their descendants born in the United States represent more than 60 different ethnicities.[232] In the 2000 census, the largest subpopulations who indicated that they belonged to only one racial group that was Asian were (in descending order) people of Chinese, Filipino, Asian Indian, Korean, Vietnamese, and Japanese ancestry.[233] Between 2000 and 2010, Asian Indians and Vietnamese grew faster than the other large groups (an increase of 70 percent and 40 percent, respectively) while the Japanese population decreased in size (by 1.2 percent). Thus, in the 2010 census, although the largest Asian subpopulations remained the same, the order based on the population size has changed to Chinese, Asian Indian, Filipino, Vietnamese, Korean, and Japanese.[234]

Figure 7
Asian (Alone) Population by Major Subgroups, 2010



Source: Hoeffel, E. M., Rastogi, S., Kim, M. O., & Shahid, H. (2012, March). The Asian population: 2010. *2010 Census Brief* (C2010BR-11), p. 15. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf

Table 9
Asian (Alone) Population by Detailed Subgroups, 2010

Subgroup	Number*	Percent
Asian Indian	2,918,807	19.9
Bangladeshi	142,080	1.0
Bhutanese	18,814	0.1
Burmese	95,536	0.7
Cambodian	255,497	1.7
Chinese	3,535,382	24.1
Filipino	2,649,973	18.1
Hmong	252,323	1.7
Indonesian	70,096	0.5
Iwo Jiman	2	**
Japanese	841,824	5.7
Korean	1,463,474	10.0
Laotian	209,646	1.4
Malaysian	21,868	0.1
Maldivian	102	**
Mongolian	15,138	0.1
Nepalese	57,209	0.4
Okinawan	5,681	**
Pakistani	382,994	2.6
Singaporean	4,569	**
Sri Lankan	41,456	0.3
Thai	182,872	1.2
Vietnamese	1,632,717	11.1
Other Asian, not specified	238,332	1.6
Total	**14,674,252**	**100.0**

*Percent rounds to 0.0.

**The numbers by detailed Asian group do not add to the total Asian population because respondents reporting several Asian groups were counted several times.

Source: Hoeffel, E. M., Rastogi, S., Kim, M. O., & Shahid, H. (2012, March). The Asian population: 2010. *2010 Census Brief* (C2010BR-11), p. 15. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf

In 1970, when Asians and Pacific Islanders were totaled together, this population (both females and males) was 1.5 million, with Asians the overwhelming majority of the total. The 1990 census counted 7.2 million Asians and Pacific Islanders, with Asians totaling more than 6.9 million (96 percent). While more than 10 million Americans selected an Asian race as their only designation in the 2000 census, an additional 1.6 million people indicated that their race was Asian along with another racial background.[161] Asians were more than 3 percent of the total U.S. population and about 15 percent of all people of color who designated a single race category in 2000.[161] Asian women were 12.6 percent of all women of color and 52 percent of all Asian Americans.[9] In 2010, the Census Bureau counted 14.7 million Americans who were Asian alone,[234] including 7.7 million women (more than 52 percent of all Asian Americans).[235]

Most Asian (alone) Americans—more than 96 percent—reside in metropolitan centers.[116] New York, Los Angeles, San Jose, San Francisco, and San Diego were the five cities with the largest Asian populations in 2010.[234] Sixty-two percent of the population of Honolulu County, Hawaii, was Asian (alone or in combination).[234] The states with the largest shares of Asians in 2010 were California, New York, and Texas. Almost half (48 percent) of all Asians lived in these three states, while large shares of Asians also lived in New Jersey, Hawaii, Illinois, and Washington. Among all the states, Asians constituted the largest proportion of the population of Hawaii—57 percent.[234] However, in 2010, California was home to 43 percent of the Filipinos, more than one-third of the Chinese (36 percent) and Vietnamese (37 percent), almost one-third of the Japanese (33 percent), 30 percent of the Koreans, and nearly one-fifth (19 percent) of the Asian Indians in the United States.[234]

When growth of the Asian populations by state is examined between 2000 and 2010 (comparing the Asian population in 2000 with the population of Asians alone in 2010), the five states with the largest increases were Nevada (117 percent), Arizona (92 percent), North Dakota (92 percent), North Carolina (84 percent), and Georgia (82 percent). Only two of these states (Nevada and Arizona) are near the West Coast, while the three other states are not traditionally considered homes for large numbers of Asians. Despite this recent pattern of state increases, 45 percent of the Asian population resides in the Western region of the United States.[234]

Table 10
Ten Places With the Largest Percentages of Asian Americans, 2010

Place	Total Population	Asian Alone or in Combination	
	Number	Rank	Percentage of the Total Population by Place
Urban Honolulu CDP, HI*	337,256	1	68.2
Daly City, CA	101,123	2	58.4
Fremont, CA	214,089	3	54.5
Sunnyvale, CA	140,081	4	43.7
Irvine, CA	212,375	5	43.3
Santa Clara, CA	116,468	6	40.8
Garden Grove, CA	170,883	7	38.6
Torrance, CA	145,438	8	38.2
San Francisco, CA	805,235	9	35.8
San Jose, CA	945,942	10	34.5

*Urban Honolulu CDP, HI, is a Census-designated place (CDP). CDPs are the statistical counterparts of incorporated places and are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located.

Source: Hoeffel, E. M., Rastogi, S., Kim, M. O., & Shahid, H. (2012, March). The Asian population: 2010. *2010 Census Brief* (C2010BR-11), p. 13. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf

A large share of the growth in the Asian population can be attributed to recent immigration. In 2011, almost two of three Asians (64 percent) in California were foreign born.[236] Asians comprised one-quarter (25 percent) of the United States' foreign-born population in 2011.[163] These immigrants came mainly from China, India, the Philippines, Vietnam, and Korea.[237] In 2010, among the foreign born, the Asia-born category was second only to the Latin America–born category in the number of naturalized U.S. citizens.[115] Also, among the foreign born in the United States, the Asia-born population reported the highest percentage (49 percent) of people with a bachelor's degree or higher.[115]

Major Subpopulations

The varied histories of the many Asian subpopulations who have immigrated to the United States contribute to the wide, bipolar distributions of their socioeconomic position and health. Most Asian immigrants have come to the United States since 1965, with the passage of the 1965 Immigration Act that discouraged systematic discrimination against Asians and promoted family reunification. In 1965, Asians constituted 7 percent of immigrants, but by 1970, they made up nearly 25 percent of immigrants to the United States.[238]

Chinese immigration to this country, however, dates back to the late 1700s, when small numbers of Chinese came on trade and educational missions. Beginning in the mid-1800s, with the decline of the African slave trade and the discovery of gold, Chinese immigration increased rapidly as waves of mostly male Chinese were brought to the United States as cheap, docile laborers to work in the mines and on the railroads in the Western states.[239] This new servant class became the new "Negro" for the white majority.[238] Later labeled as the "yellow peril" or as disease ridden and heathen, the Chinese were barred from entering the United States on the basis of race alone by the Chinese Exclusion Act of 1882.[240] In addition, Chinese wives of laborers were barred from

entering the United States in 1884.[241] The National Origins Act (also known as the Oriental Exclusion Act) of 1924 sharply halted further Chinese immigration until the 1940s, when immigration restrictions began to relax in recognition of China's role as an ally to the United States during World War II. The Immigration Act of 1965 paved the way for increased immigration, and in 1981, the act was amended to allow additional Chinese to immigrate to the United States.[242]

Between 1980 and 1990, the Chinese American population doubled, mostly due to immigration. In 1990, more than 1.6 million people of Chinese descent resided in the United States and constituted 23 percent of the Asian American population.[243] By 2000, this number had risen to 2.4 million who identified themselves as Chinese only, comprising nearly a quarter (about 24 percent) of all Asian Americans.[233] The 2010 census counted 3.5 million Chinese, about 24 percent of the Asian American alone population.[234] Today, 76 percent of all Chinese Americans are foreign born.[244] Although Chinese Americans live throughout the United States, the largest concentrations are in California (more than 1,253,000) and in New York state (nearly 577,000).[59]

Filipino and Asian Indian are the next largest Asian American populations in the United States. Filipino is the second largest based on the size of the Asian alone-or-in-any-combination population (3.4 million), followed by Asian Indian (3.2 million). However, for the Asian-alone population where only one detailed Asian group is reported, Asian Indian is the second largest group (2.8 million), followed by Filipino (2.6 million).[234]

Some Filipino Americans define themselves by the "braiding of cultures" they represent—Asian, Spanish, American, African, and Pacific Islander.[240] Beginning in 1892 with the ceding of the Philippines to the United States following Spain's loss in the Spanish-American War, Filipinos have migrated to both Hawaii and the mainland United States in several waves. Between 1906 and 1934, a wave of Filipinos came to the United States, mainly Hawaii, where they worked on sugar plantations.[242] The 1920s was a decade of a dramatic increase in the number of Filipino migrants to the United States, with some 45,000 migrating to the Pacific Coast, mainly as agricultural workers. They filled labor shortages on farms and in canneries on the West Coast that had resulted because of the exclusion of Chinese, Japanese, Koreans, and other Asians by the 1921 and 1924 immigration acts.[240] Yet another wave migrated after World War II to work in agriculture in Hawaii and on the mainland United States.[242]

The current wave of Filipino immigrants—consisting of fewer single men, more family groups, and more highly educated people—began after 1965 and continues today.[245] More than 69 percent of Filipino Americans are foreign born.[244] The Filipino population of the United States increased 81 percent between 1980 and 1990, and the population has continued to grow since then. In 1990, Filipino Americans numbered 1.4 million and were 19 percent of all Asian Americans.[243] According to the 2000 census, more than 1.8 million people—18 percent of the Asian American population—were of solely Filipino ancestry.[246] Between the 2000 and 2010 censuses, the population of Filipino (alone) Americans increased by 39 percent to total more 2.6 million in the 2010 census, although it remained 18 percent of the Asian (alone) population.[234]

By the end of the 20th century, the Asian Indian population had doubled, from more than 800,000 in 1990 (11 percent of all Asian Americans then) to more than 1.6 million in 2000 (more than 16 percent of all Asian Americans at that time).[233] The 2010 census counted 2.9 million people who identified themselves as Asian Indian only and 3.2 million who identified themselves as Asian Indian only or in combination with at least one other race.[234] In 2010, almost equal shares of Asian Indians lived in the Northeast (30 percent) and South (29 percent), one-quarter (25 percent) lived in the West, and about one in six (16 percent) lived in the Midwest.[234] California had the largest number of Asian Indian residents (nearly 530,000), while New York state was home to the second largest number (nearly 314,000).[59] Nearly 9 in 10 Asian Indian adults (87 percent) in the United States are foreign born, and nearly two-fifths of these immigrants (38 percent) arrived in the past 10 years.[244] Asian Indians are one of the most diverse populations of Asian Americans in terms of educational attainment, socioeconomic status, language, diet, and religion.[247]

Korean Americans, one of the most homogeneous Asian populations in terms of language, ethnicity, and culture, also are one of the fastest growing populations in the United States.[248] Their numbers increased more than tenfold between 1970 (70,000 people) and 1990 (800,000), and by a quarter between 1990 and

2000 (to more than 1 million), to make Korean Americans almost 11 percent of the total U.S. Asian population at the turn of the century.[233] According to the 2010 census, nearly 1.5 million people identified themselves as Korean only. When those who identified themselves as Korean and at least one other race are counted, more than 1.7 million Korean Americans were enumerated in 2010.[234]

Korean Americans migrated to the United States in response to unstable conditions such as drought, famine, and epidemics in their homeland in the late 1800s and early 1900s, which sent them to Hawaii and the U.S. mainland primarily as contract laborers.[249] The first group of official Korean immigrants came to Hawaii in 1903 to work as laborers on sugar plantations.[250] Within the next few years, more than 7,000 additional Korean immigrants, mostly men, followed them to Hawaii to work on the plantations. The "Gentlemen's Agreement" allowed some Korean women to immigrate to join their husbands, along with "picture brides" who immigrated to marry men they had met only through the exchange of photographs. The second major wave of migration resulted from U.S.-Korean interaction during the Korean War (e.g., wives of servicemen; orphans adopted by Americans). The third and largest wave of immigration followed the 1965 Immigration Act and continued through the 1980s.[251]

The Korean population of the United States more than doubled between 1980 and 1990, with most of the growth due to immigration; in 1990, more than 80 percent of all Korean Americans were foreign born.[241] In 2000 and 2010, roughly the same proportions (nearly 78 percent in 2000 and 79 percent in 2010) of all Korean Americans were foreign born.[244] Post-1965 Korean immigrants tended to come to the United States as families. Many of the immigrants were well educated but were unable to find employment in the United States, sometimes due to their lack of fluency in English, and opened small businesses instead.[251]

Japanese Americans are the only Asian population with primarily one immigration period (1880–1924) and with little subsequent immigration.[241] Immigration from Japan to both Hawaii and the mainland United States occurred in large numbers between 1890 and 1908, mostly by Japanese men attracted to the American Gold Rush. After 1908, with the enactment of the Gentlemen's Agreement, the wives, children, and parents of those male immigrants were allowed to immigrate to the United States, but further immigration by laborers was halted.[252] The Immigration Act, however, barred Japanese and other Asians from entering the United States after 1924 and contributed to the marked distinctions between the first-generation Japanese Americans (Issei) and second (Nisei) and subsequent generations.[252] Because first-generation Japanese Americans, many of whom were relocated and interned in prison camps in the United States during World War II, migrated to the United States when Japan had a single language without significant dialects, they have a stronger sense of Japanese nationalism than the immigrants constituting later generations. The Nisei, the first American-born generation of Japanese, on the other hand, became highly acculturated to U.S. society as a reaction to other Americans questioning their loyalty during World War II and thus identify less with Japanese nationalism.[253]

In 1990, a total of 847,562 Japanese Americans lived in the United States.[241] In 2000, the population of Japanese Americans who identified themselves as Asians alone and lived in the United States had increased only slightly to a total of 852,237. In 2010, this population had declined 1.2 percent to 841,824. Their share of all Asian Americans decreased from 8.3 percent in 2000 to 5.7 percent in 2010. However, the Japanese Americans who identified themselves as Asian in combination with one or more other races grew 56 percent from 296,695 in 2000 to 462,462 in 2010.[234] The majority of the Japanese alone-or-in-any-combination population resided in California (33 percent of all Japanese) and Hawaii (24 percent of all Japanese). Nearly 70 percent of all Japanese Americans were born in the United States, making them one of the most acculturated Asian populations, with a stable middle class composed largely of white-collar workers and professionals.[244]

Southeast Asians began to migrate to the United States primarily after 1975, as the conflicts in that region in Cambodia, Laos, and Vietnam were winding down. The majority of refugees of these conflicts to come to the United States were Vietnamese, about 131,000 of whom left their homeland in 1975 with the fall of Saigon. Beginning in 1978, substantial numbers of Vietnamese refugees known as "boat people" began entering the United States.[254]

Many Hmong (an indigenous migrant hill tribe native to southern China and Southeast Asia) also migrated to the United States following the end of the

Vietnam War. Hmong soldiers had helped the U.S. Central Intelligence Agency wage a secret war in Laos from 1961 to 1973, and when the Lao coalition government fell and American forces withdrew from Laos, thousands of Hmong were forced to flee for their lives. Many fled to refugee camps in Thailand to avoid the ruling Communists in Laos, who sought to eliminate the Hmong in retaliation for their opposition during the war. The Hmong were then given refugee status in the United States, and many resettled in large enclaves in California, Wisconsin, and Minnesota.[255]

The earlier waves of refugees during the post-1975 period generally were better educated and wealthier than later arrivals, many of whom—especially Hmong and Laotians—were poor, illiterate, and not at all used to Western culture at the time of their resettlement. The trauma of dislocation and resettlement is related to many of the health problems of these Asian subpopulations, including posttraumatic stress disorder (PTSD).[255] Although many of the younger Southeast Asian refugees adequately adapted to their new homeland with the passage of time, older, middle-aged, and elderly refugees sometimes experienced social and emotional turmoil 10 to 15 years after their arrival, when they were no longer likely to be sheltered by younger family members.[256]

Compared with 32 percent of all foreign-born Asians, nearly 74 percent of foreign-born Cambodians, nearly 66 percent of foreign-born Laotians, and more than 46 percent of foreign-born Hmong entered the United States between 1980 and 1989.[246] About 615,000 Vietnamese, 149,000 Laotians, 147,000 Cambodians, and more than 90,000 Hmong resided in the United States in 1990.[257] According to the 2000 census, the Vietnamese population alone numbered nearly 1.2 million, in addition to nearly 184,000 Cambodians, nearly 175,000 Hmong, and more than 179,000 Laotians.[234] In 2010, according to that year's census, more than 1.6 million Vietnamese, more than 255,000 Cambodians, more than 252,000 Hmong, and nearly 210,000 Laotians lived in the United States.[234] More Southeast Asians live in Western states than in any other region, led by the 37 percent of Vietnamese living in California.[234]

Factors Affecting Health

In 1966, the "model minority" image replaced the negative stereotypes of Chinese and other Asian Americans in the United States. Coming shortly after the 1965 Watts riots in Los Angeles, this labeling is viewed by some as an attempt to provide proof that the U.S. social system does work for people of color.[238] This "model minority" stereotype, however well intentioned, has direct implications for the health of Asian Americans. It tends to trivialize the health problems of Asians, suggesting that they can take care of these problems on their own, and overlooks the diversity among Asians and the problems faced by some of the newest immigrants.[258,259]

The health problems of Asian Americans are worsened by a complex set of cultural, linguistic, structural, and financial barriers to care. In 2011, a language other than English was spoken at home by 77 percent of Asian Americans, compared with 21 percent among the total U.S. population.[260] Two-thirds (67 percent) of Asian Americans are foreign born,[236] and, in 2010, only 20 percent of all Asian mothers who gave birth in the United States had themselves been born in the United States.[261] If residing illegally in the United States, Asian Americans may not seek medical care for fear that this would expose their illegal status and result in deportation.

Fifty-nine percent of all Asian women were in the labor force in 2011,[262] with 47 percent in management, business, science, and arts occupations. Twenty-one percent of Asian females had service occupations; 7 percent had production, transportation, and material moving occupations; and an additional 0.6 percent had natural resources, construction, and maintenance occupations.[263]

In 2011, poverty rates were generally low for Asians. Only 12.3 percent of the Asian-alone population, 8.1 percent of the Asian-alone population in married-couple families, and 20.8 percent of the Asian-alone population in families headed by a female with no husband present reported incomes below the poverty level.[191] These averages, however, mask considerable variation among subpopulations. For example, the percentage of the adult population below the poverty level ranged from a low of 6.2 percent among Filipino Americans to a high of 23.6 percent among Hmong in 2010 (compared with about 12.8 percent for the entire U.S. population). A relatively high proportion of Bangladeshi (20.0 percent) and Cambodian (16.8 percent) Americans also reported poverty-level incomes.[244]

Both household and individual incomes for Asian Americans support the finding of disparate poverty rates among the subpopulations. In 1979, Asian

Americans had an average household income of $6,900, less than the U.S. average of $7,400. At that time, only Indonesian, Chinese, and Japanese Americans had average per capita incomes above the U.S. average.[257] In 1989, the median family income for Asians and Pacific Islanders was $35,900 (higher than the $35,000 median family income for non-Hispanic white Americans), and 37 percent of all Asian and Pacific Islander American households had annual incomes of at least $50,000. At that same time, more than 5 percent of Asian and Pacific Islander households had incomes of less than $5,000, and nearly 12 percent had incomes of less than $10,000.[264]

In 2002, the median household income for Asian (alone) Americans was $65,792. It increased to $71,704 in 2007 and then started falling due to the recession of 2007–2009. By 2011, the estimated median household income for Asians was $65,129, considerably higher than $55,412, the median family income for whites (alone, non-Hispanic) that same year. Forty-four percent of Asian households had incomes of at least $75,000 in 2011.[142]

In 2010, the U.S. labor force included 7.2 million Asian Americans, of whom nearly 60 percent were employed. Almost one in six (16 percent) of those employed was working part-time. Forty-six percent of all employed Asians were women.[265] Asian Americans have the lowest unemployment rates among racial and ethnic groups. In 2010, the Asian American unemployment rate averaged 7.5 percent, compared with 8.7 percent for whites, 12.5 percent for Hispanics, and 16.0 percent for blacks.[265] The unemployment rates of Asian Americans varied by ethnicity. Japanese had the lowest unemployment rate in 2010 at 4.6 percent, followed by Koreans (6.4 percent), Chinese (6.5 percent), Asian Indians (6.6 percent), Vietnamese (7.6 percent), Filipinos (8.5 percent), and other Asians (10.3 percent).[265]

Health insurance coverage varies among Asian American women, as do employment and income levels. Eighty-four percent of all Asian women reported having some type of health insurance coverage in 2011.[266] Fifteen percent of Asian women reported Medicaid coverage and 11 percent reported Medicare coverage in 2011.[266] Nearly two-thirds (66 percent) of Asian women had private health insurance.[266]

Despite high rates of coverage in general, selected populations lack health insurance, and this lack of health insurance causes some Asian American women to become frequent users of hospital emergency rooms. Among all U.S. Asian (alone) populations, almost 17 percent were without health insurance in 2011.[266] When examining the lack of health insurance coverage by ethnic subgroup, however, the proportions uninsured ranged from a low of 11 percent among third-generation and higher Asian Americans to a high of 31 percent among Koreans during 2004–2006. Koreans were also the least likely to have health insurance coverage through their employers—49 percent, in contrast to 77 percent among Asian Indians who had employer-sponsored coverage. Reliance on Medicaid and other public coverage ranged from 4 percent among Asian Indians to 19 percent among Other Southeast Asians.[267] Uninsured Asians are more than four times as likely to lack a usual source of care as are insured Asians. Among uninsured Asians, Other Asians (58 percent) and Chinese Americans (55 percent) are the most likely to have not visited the doctor in the past year, in contrast to Asian Indians (42 percent) and Filipinos (36 percent), whose rates are comparable to those of whites (non-Hispanic) (39 percent).[267]

Although Asian American women overall exhibit healthful lifestyle behaviors, such as lower smoking prevalence (4 percent), compared with all American women (17 percent), there is variation by subpopulation in both healthful behaviors and the prevalence of illness.[268,269] For example, in one California study, 8 percent of all Asian women were found to be current smokers, including 6 percent of Chinese women and nearly 11 percent of Filipina women.[270] Even though Asian women smoke less than their female counterparts of other races, Asian men of some subgroups (e.g., Korean, Filipino, and Vietnamese) have high smoking prevalence, exposing the females in their homes to noxious levels of secondhand smoke.[271] A survey of Asians in Pennsylvania and New Jersey found that 38 percent of those surveyed had been exposed to secondhand smoke in their homes during the past week, including 30 percent of Chinese, 42 percent of Korean, 44 percent of Cambodian, and 45 percent of Vietnamese respondents.[272]

The risk of hypertension also varies by subpopulation. In the 2009 California Health Interview Survey, 21 percent of Asian females of all subgroups reported having ever been diagnosed with hypertension. Hypertension was more of a problem for Asian women who were Filipina (40 percent) and Japanese (33 percent) than for women who were Chinese (16 percent), Vietnamese (12 percent), South Asian (10

percent), or Korean (9 percent). In the same survey, 26 percent of all Californians reported having ever been diagnosed with hypertension.[273]

Other conditions, such as tuberculosis, are more common among Asian populations than among other racial/ethnic groups. The prevalence of tuberculosis among Asian non-Hispanic Americans was more than 26 times that for white non-Hispanic Americans in 2011. This higher prevalence is due primarily to the facts that a larger percentage of Asian Americans than other racial/ethnic groups is foreign born and that foreign-born Americans have much higher tuberculosis rates than native-born Americans—over 11 times as much.[169]

The lack of knowledge of risk factors or preventive behaviors for various diseases also is a problem for Asian Americans.[269,274] For example, knowledge about cervical cancer—its risk factors and screening guidelines—is limited among Asian American women.[275] Few are aware that HPV is a primary risk factor, and many instead believe that getting rest, eating right, and avoiding stress can prevent cervical cancer. This lack of knowledge is associated with nonadherence to screening. In one study of Korean American women, those who were familiar with the cervical cancer screening guidelines were found to be three times as likely to have had the Pap test.[276]

The subsequent failure of Asian women to get regular screenings relates to a lack of knowledge of risk factors and to their knowledge and beliefs about cancer. Cervical cancer disproportionately affects certain Asian women. However, some Cambodian American women believe that they are not at risk for cervical cancer because it is an "American disease."[277] One survey of Vietnamese women in Seattle found that nearly two-fifths (39 percent) did not believe that cervical cancer is curable, even if detected early.[278] In addition, fewer than one-fourth (23 percent) of Vietnamese women thought they were more likely to get cervical cancer than white women. To the contrary, based on 2000–2002 data from California, Vietnamese women have one of the highest incidences of invasive cervical cancer of racial/ethnic subgroups in the United States.[279]

Despite high incidence rates, Asian women often do not get screening with a Pap smear, which can detect cervical cancer at an early treatable stage. In a survey of Vietnamese women in Seattle, only 62 percent believed that regular Pap smear tests could reduce the risk of cervical cancer, and only 61 percent believed cervical cancer was curable if caught early.[278] Combined with concerns about modesty as well as concerns about the pain and discomfort associated with this test, this lack of confidence in the importance of cervical cancer screening no doubt contributes to low testing rates. Only 62 percent of the women in the survey reported having had a Pap test in the past 2 years. Married Vietnamese women are much more likely than single, divorced, or widowed women to have had recent Pap smears. This may be related to the existing stigma in the Vietnamese culture against unmarried women who are sexually active.[278]

According to 2007 data from the California Health Interview Survey, women of Asian subgroups living in California were somewhat more likely to report Pap testing. Three of four Vietnamese women (76 percent) and Japanese women (75 percent) reported receiving the test within the past 3 years, as did 73 percent of Korean women. Chinese women (65 percent) were the least likely to report having had the procedure.[280]

Hmong women also have high cervical cancer incidence rates and, once diagnosed, are less likely to accept standard Western medical treatment for cervical cancer.[277] For example, the rate among Hmong women in California during the 1996–2000 period was 33.7 per 100,000, a decrease from their rate of 50.5 per 100,000 during the 1992–1995 period. However, the rate of 33.7 per 100,000 was still more than three times the rate among all Asian/Pacific Islander women and more than four times the rate among white non-Hispanic women during that time period. Most striking, though, was the difference in rates of first-course treatment for cervical cancer. Whereas fewer than 6 percent of all Asian/Pacific Islander women and fewer than 5 percent of white non-Hispanic women declined first-course treatment, 51 percent of Hmong women declined treatment. This difference is attributed to lower literacy and education rates, less access to health care, more linguistic and cultural isolation, and differences in beliefs surrounding treatments—namely, a greater focus among the Hmong on traditional healing rituals than on Western medicine.[281,282]

The reluctance of Cambodian and other Southeast Asian women to access health screening such as the Pap smear often relates to the traumas that resulted in their resettlement in the United States. Although experiences such as torture, starvation, rape, forced labor, and witnessing murder are shared by many

refugees who have come to the United States, among recent waves of immigrants, Cambodians are thought to be the most traumatized by the turmoil in their homeland during the Khmer Rouge regime. "Ghosts of things over and done with" often assume a "seething presence" (of a lost child, a lost village, or a war remembered in detail) that presents itself and must be addressed during a clinical examination.[259,283] Ironically, in the case of Pap testing, the technology (applied via the use of a speculum) that is intended to relieve suffering instead very often invokes it.[284] Thus, the disparity in rates of cervical cancer between Cambodian (and other Southeast Asian) women and white non-Hispanic women is not only about the prevalence of a preventable disease within this population of women but also about colonial history, education, communist ideology, U.S. retaliation, and then relocation to the United States.[281]

Mammography, another form of screening for early disease detection, also is underused by Asian women.[285,286] As with the Pap smear and cervical cancer, the failure to get mammograms is of particular concern because of the increase in breast cancer rates among Asian women (especially Chinese, Japanese, and Filipina) over time after their migration to the United States. Breast cancer rates among Asian women in their native countries are between 25 percent and 50 percent of the rates among Asian women in the United States. With immigration, however, breast cancer rates among Asian women increase to mirror the higher overall rates of women in the United States. One study of breast cancer incidence among Japanese women who migrated to Los Angeles, San Francisco, and Hawaii versus the incidence among women who stayed in Japan revealed incidence rates more than double among the migrants (63 per 100,000 in Los Angeles, 68 per 100,000 in San Francisco, and 73 per 100,000 in Hawaii) compared with that among Japanese women living in Japan (between 24 per 100,000 and 31 per 100,000). Another study showed that the third generation of Asian women in the United States has rates of breast cancer similar to or greater than the rates among white women in the United States.[287]

Prenatal care is yet another form of preventive care that many Asian American women do not receive. This is due to a variety of cultural and socioeconomic factors, including lack of knowledge about its importance. In one study of births to mothers in the racially and ethnically diverse San Joaquin Valley in California, Asian and Pacific Islander mothers, regardless of nativity, were the most likely to report both late initiation of prenatal care (one in four births) and nonadherence to the schedule of prenatal visits (more than half of mothers).[288] Other research based on live California births between 2000 and 2004 pointed out, however, the fact that receipt of adequate prenatal care was more often a challenge for Pacific Islander women than for Asian women and for American Samoan mothers in particular.[289]

Fear of difficulties in communicating—compounded by shame, guilt, anger, depression, and other responses to certain stigmatized conditions such as mental illnesses and substance abuse—often deters Asian Americans from seeking care promptly.[239] For example, many Chinese Americans will seek treatment for the physical symptoms resulting from depression or other mental health disorders but will not directly attribute those symptoms to their mental health origins, a phenomenon known as somatization. However, if properly prompted or asked directly, they will also report psychological factors and symptoms. This pattern of reporting symptoms could be due to a lack of awareness either of mental disorders or of the possibility that symptoms have psychological rather than physical origins. It also could be due to a belief that health care providers are more interested in physical symptoms.[290] Some Cambodians perceive mental health problems as the result of evil spirits that must be warded off. Because of their religiosity, Korean Americans are likely to confuse hallucinations with spiritual voices and not seek care. They also are likely to self-medicate for conditions that may not respond to medication.

The traumas of war, leaving one's homeland, and resettling in another land often result in unique medical conditions, such as the psychosomatic or nonorganic blindness reported among Cambodian women age 40 years and older.[259,283] Hmong and Cambodians report the highest levels of psychological stress of all Southeast Asian groups in the United States.[259] Depression and PTSD are widely prevalent among Cambodians and other Southeast Asians, even after years of living in the United States.[283] Among Asians in California, the Vietnamese experience frequent mental distress and at higher rates than do other Asian groups.[291] In addition, one study found in a sample of Cambodian refugees a 12-month prevalence of 62 percent with PTSD and of 51 percent with major depression.[292]

To compound their stresses and trauma, some poor Southeast Asian immigrants resettle in neighborhoods in the United States where they continue to be exposed to violence. For example, a study of Cambodian refugees who resettled in California found that, after migration, 34 percent had seen a dead body in their neighborhood, 28 percent had been robbed, 17 percent had been seriously threatened with a weapon, and 14 percent had experienced a serious accident in which someone was hurt or died.[292] Although psychological problems are often found among such resettled immigrants, depression is also found among Korean Americans, many of whom are recent immigrants but most of whom migrated to the United States without war-related trauma.[293] Depression levels among Korean Americans have been found to decrease among those with higher levels of language-associated acculturation (as measured by speaking English more than Korean) but to also increase among those whose greater assimilation into U.S. culture has resulted in some loss of a connection with traditional Korean culture and identity.[294]

Even if Asian American patients seek care, both high rates of poverty and a lack of health insurance—or underinsurance—may limit access to needed services.[246,274] For example, in California, a third of Koreans ages 19 to 64 years are uninsured, as are 17 percent of Vietnamese—both above the overall state uninsured rate of 15 percent.[291]

Language barriers—specifically the lack of English proficiency and a shortage of health care providers who possess the necessary cultural and language skills—also limit the ability of nearly half of the Asian/Pacific Islander population to access the mental health care system.[283] Although Asian American patients prefer trained interpreters, sometimes patients' children or grandchildren are used to translate at medical appointments due to a lack of trained interpreters.[274] However, family members may not be familiar enough with medical terminology to adequately translate or may be reluctant to fully translate out of embarrassment or discomfort.[295] In addition, some Asian Americans with limited English-speaking skills tend to refrain from asking questions about their health. One study found this to be particularly true for elderly Asian Americans, a group least likely to be proficient in English in general and for Chinese and Vietnamese in particular.[296,297] Language barriers can clearly compromise the quality of the patient's care.[298]

In addition, not all English medical/health terminology can be readily translated into the various Southeast Asian languages, nor can many Southeast Asian expressions describing physical and mental conditions be directly translated for U.S. health care providers.[283] For example, there are no words in the Khmer language for medical terms such as "Pap testing," a fact that creates a barrier to increasing cervical cancer screening rates among Cambodian women.[299] Not only do many Hmong (especially those born in Laos) have minimal knowledge of the human body organs and how they work, but most English medical and anatomical terms also have no equivalents in the Hmong language. Translators may need to use several sentences to translate a term that would require one word in English. In addition, Hmong from Laos are not familiar with chronic illnesses that can be "controlled but not cured." In Laos, "you got sick and you either got better or you died." Thus, it is difficult for many Hmong to understand diagnoses and treatments.[300] Vietnamese women, due to cultural norms and modesty, generally do not distinguish between anatomical parts when discussing their genital area. Whereas "Americans distinguish every part," Vietnamese "talk generally about the bottom area of a woman," often referring to the cervix and uterus interchangeably. This can create difficulties for patient-physician communication, especially for a physician who is unaware of such cultural norms.[301]

Differences in cultural patterns, even among highly acculturated Asian Americans, suggest different interpretations of etiology, personal control, and responsibility with respect to health. For example, many Chinese follow the Confucian principle of behavior that discourages individuals from sharing upsetting information with other people. Thus, Chinese Americans may delay sharing health concerns with family or friends for fear of causing pain or discomfort.[302] Likewise, they may be reluctant to consult physicians about health problems, believing that the problem is a personal issue best kept to themselves or among close family members.[283,303] Japanese Americans, on the other hand, see health as a matter of will, with a strong emphasis on the mind-body connection. They are likely to believe that thinking about getting sick can make one sick. Filipino Americans, however, are more likely to emphasize the relationship between body and soul for health maintenance and illness prevention. For them, health is a

moral statement about the correct fulfillment of social (particularly kin) obligations.[302]

If Asian Americans get to health care providers and if translators are available, communication still is not guaranteed and appropriate care may not be received. For example, differences between the medical systems in the United States and China constitute a further deterrent to Chinese Americans born in China but in need of health care in the United States.[304] In China, physicians generally prescribe and dispense medication, charging only a nominal fee for their services; the major cost for the visit is the medications. Because the idea of a visit to a medical professional for a checkup without getting prescriptions for medications does not live up to the expectations of many Chinese Americans, they are reluctant to make visits for routine or preventive care.[269,274]

Some Korean Americans (especially the elderly), many of whom have extreme difficulty with English, report using the traditional Korean medicine *hanbang* and other over-the-counter Korean home remedies rather than going to physicians in the United States. They avoid going to physicians because of communication and cultural difficulties. However, Korean Americans are more likely to use traditional medicine as a supplement to Western medicine than to use traditional medicine alone.[274]

Other cultural characteristics that influence the health of Asian Americans are collectivism, familism, respect for authority, and a desire to preserve harmony within groups. Asian cultures—like Hispanic cultures—often emphasize family decision making.[283,305] All family members are typically involved in learning all the details of a patient's condition, and decisions regarding care are made (often by the eldest son in the family) with the good of the overall group in mind. In addition, the doctor-patient relationship in Asian cultures differs notably from that in health care settings in the United States. Asian immigrants are likely to be accustomed to a hierarchical doctor-patient relationship in which deference is paid to the physician's decisions and expertise.[274] As the doctor-patient relationship in the United States evolves from the more paternalistic, doctor-centered model to a more consumer-driven model, Asian immigrants may find it more difficult than do native-born residents to play an active role in their health care. This fact may compromise health outcomes among Asian Americans.

Although little research has been done on either alcohol or substance abuse among Asian American women, available data suggest that Asians use and abuse alcohol and other substances less frequently than do members of other racial/ethnic groups. In 2011, among people aged 12 years or older, the rate of substance dependence or abuse was lower among Asians (3 percent) than among other racial/ethnic groups. The rates for other racial/ethnic groups were 17 percent for American Indians or Alaska Natives, 11 percent for Native Hawaiians or Other Pacific Islanders, 9 percent for Hispanics, 8 percent for whites, and 7 percent for blacks.[306] The pattern has been attributed, in part, to the fact that Asians (especially Chinese, Japanese, and Koreans) are sensitive to ethanol, and drinking alcohol can result in facial flushing, or "flushing syndrome." Although this sensitivity to alcohol is rare among whites, 40 to 50 percent of Japanese possess it.[307] Low drinking rates among all Asian American groups seem to be due to high percentages of abstainers.[308]

Data from 2004 to 2008 for Asian adult populations (age 18 years and older) in the United States found that Koreans were the most likely to report having consumed any alcohol in the past month (52 percent), followed by Japanese (48 percent), Chinese (41 percent), Vietnamese (39 percent), Filipino (38 percent), and Asian Indians (32 percent).[309] The data for binge alcohol use show a somewhat different pattern, although Koreans are most likely to report both past-month alcohol use (52 percent) and past-month binge drinking (26 percent). After Koreans, binge drinking is reported by 15 percent of both Filipino and Japanese adults and by 14 percent of Vietnamese. Ten percent of Asian Indian and 8 percent of Chinese adults also reported binge drinking.[309] Alcohol use among Asian Americans tends to increase with acculturation, although other factors, such as socioeconomic status and religious affiliation, also play a large role in determining alcohol use.

Although risk factors for and patterns of substance use and abuse have been identified among selected Asian youth populations, prevalence is generally lower than among youth of other racial/ethnic groups. Asian adults ages 18 to 25 years are considerably less likely than the national average for young adults to report past-month alcohol use—49 percent of Asians versus 61 percent for all young adults. They are similarly less likely to report past-month binge alcohol

use (26 percent for Asians versus 42 percent for all young adults) and illicit drug use (9 percent for Asians and 20 percent for all young adults).[309] Among all Asian adults (age 18 years and older), past-month illicit drug use is notably less than among Asian young adults. Past-month use of illicit drugs among Asians age 18 years and older was highest for Japanese (6 percent), Koreans (5 percent), and Vietnamese (5 percent). Only 3 percent of Filipino adults and 2 percent of both Chinese and Asian Indian adults reported past-month illicit drug use.[309]

The vast differences between Asian societies and the United States mean that the most basic economic and socioemotional needs of new immigrants may not be met by existing institutions. Some of this mental illness results from prolonged and intense stress encountered in social situations and in the occupational environment, especially among those of higher socioeconomic status. Recent research on the relationship between objective measures of socioeconomic status and health in comparison to the relationship between subjective measures of socioeconomic status and health suggests some of the mechanisms that may be at work among Asian American populations in the United States.[310] Education, income, and occupation—characteristics that can be measured concretely—define objective socioeconomic status. Subjective socioeconomic status, on the other hand, is usually defined as one's perception of his or her social standing relative to other members of a group. Several studies have found that high levels of subjective socioeconomic status are associated with more favorable health outcomes on measures such as obesity, chronic diseases, and risky health behaviors.[311] One explanation for the relationship between subjective socioeconomic status and health is that low subjective socioeconomic status may increase stress or the vulnerability to stress. Among Asian immigrants, in particular, very few of the measures of objective socioeconomic status analyzed had consistent positive associations with health outcomes, while the measures of subjective socioeconomic status were consistently associated with almost all of the self-reported health outcomes. A possible explanation for this finding is that objective measures of education, income, and occupation may not bring the anticipated material and/or psychosocial rewards to an Asian immigrant. Education received at foreign institutions may not yield the return expected in the United States. In addition, well-educated Asian immigrants may experience discrimination and other stressors that prevent them from reaping benefits commensurate with their training and experience.[312]

Among the major mental health problems for Asian Americans are racism and racial discrimination—which adversely affect their psychoeconomic status and health, as they do for other people of color. From Japanese Americans who lived on the West Coast and were interned during World War II to contemporary Chinese Americans living in Los Angeles, racism, both blatant and subtle, has been and continues to be part of the life of Asian Americans.[313] One study of both individual (self-perceived) and institutional (segregation and redlining, for example) racial discrimination found that both were associated with poor health among Chinese Americans living in Los Angeles.[314] This study found that both individual and institutional measures of discrimination were associated with health status, after controlling for acculturation, sex, age, social support, income, health insurance, employment status, education, neighborhood poverty, and housing value.

As for African Americans, among Asian Americans, John Henryism (a strong behavioral predisposition to engage in high-effort coping with difficult barriers to success) is associated with better health and physical functioning and fewer somatic symptoms among Asian Americans.[182] John Henryism has been found to help achieve these outcomes by reducing perceived stress—both acculturative and racism related.

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