HISTORY
Most Vietnamese in the U.S. come from what was once the Republic of Vietnam, known as "South Vietnam," which had its capital at Saigon. Their government, allied with the United States, collapsed under military pressure from communist North Vietnam in 1975, starting a mass migration of Vietnamese to the United States as refugees. After Saigon came under communist control, many ex-military, government officials and Vietnamese who had worked for the U.S. during the war were resettled throughout the U.S. Thousands of Vietnamese, including former U.S. government employees, were detained in harsh "reeducation camps" for years. As conditions in Vietnam worsened, many fled to refugee camps in other parts of Asia or were reunited with family abroad. An estimated 100,000 were later released to join family members overseas. Today most Vietnamese come in the U.S. via ordinary immigration channels (Southeast Asia Resource Action Center).

DEMOGRAPHICS
The U.S. Census Bureau estimates that in 2000 nearly 1,123,000 Vietnamese lived in the United States (US Census, 2000). Vietnamese Americans are the fifth largest group among the API population (SEARAC, 2004), and make up 70% of all Southeast Asian refugees (Chilton et al., 2005). Demographers estimate that Vietnamese Americans will constitute the second largest API ethnic group by the year 2030 (Kaplan et al., 2003). The majority, or three out of four Vietnamese Americans, is foreign born (APIAHF, 2005). Vietnam ranked sixth among the top ten countries of birth among the foreign-born population in 2000 (Kandula et al., 2004). The top five states of residence include California, Texas, Washington, Virginia, and Florida (SEARAC, 2004).

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

Ninety-one percent of Vietnamese speak a language other than English at home, while 61% are limited English proficient (LEP), the highest rate among Asian Americans (APIAHF, 2005).

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

For Vietnamese Americans, the median household income stands at $44,828, higher than the national median figure of $41,994. It is important to keep in mind, however, that Asian Americans tend to have higher average household size. Vietnamese average household size is markedly higher (3.7 people) compared to the national figure of 2.6. Approximately 16% of Vietnamese Americans live below the federal poverty level, higher than the national average of 12% (SEARAC, 2004).

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

Vietnamese have twice the rate of people with less than a high school degree than Asians as a whole (38% vs. 19%). A bachelor’s degree is the highest level of attainment for 15% of Vietnamese, about the same as the general U.S. population at 16% but much lower than the aggregate Asian population at 26%. The differences illustrate the importance of disaggregating data by ethnic group. (APIAHF, 2005).
**IMMIGRATION/CITIZENSHIP STATUS**

Citizenship status also has significant and widespread effect on an immigrants’ ability to access health services and obtain insurance coverage. While an estimated 15% of citizens lack health insurance, 42% to 51% of non-citizens lack health coverage.

Seventy-four percent of Vietnamese are foreign-born, compared to 63% of all Asians. Fifty-eight percent naturalize, compared to 50% of all Asians. This is higher than the naturalization rate of White foreign born (55%) and second to Filipinos (62%) among Asian groups.

**HEALTH STATUS**

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

**HEALTH INSURANCE COVERAGE**

While very little national data exists on the level of health insurance coverage for Vietnamese Americans, analysis from the most recent California Health Interview Survey found that 17.9% of Vietnamese Americans were uninsured (Zahnd et al., 2006). While Southeast Asians are much more likely to be covered by Medicaid (18% vs. 6% among whites), reflecting their high rate of poverty and the refugee status of many Southeast Asians in the U.S., the disparity in coverage rates still exists. Much of this difference may be accounted for by their low rate of health coverage through their employment (49% compared to 73% among whites) (Brown et al., 2000). Furthermore, CDC’s REACH 2010 survey found that Vietnamese were at least three times more likely to report not visiting a physician due to cost issues than were all Asians or the general US population.

**CHRONIC DISEASES**

**Heart Disease & Stroke**

A descriptive study of 201 Vietnamese Americans on hypertension in a Gulf Coast community indicated that 44% of the sample was hypertensive (Duong et al., 2001). The use of alcohol, smoking, and lack of exercise were found to be related to high blood pressure, and that culture is influential on the control of the condition.

**Cancer**

The top five leading cancer incidence rates for Vietnamese men are lung, liver, prostate, colon, and stomach cancer, while for women, it is cancers of the cervix, breast, lung, colon, and stomach (National Cancer Institute, SEER Program). Vietnamese women have the highest rates of cervical cancer of any racial or ethnic group in the US, which is five times the rate compared to White women (43 cases /100,000 versus 8.7 cases/100,000 among White women) (Lam et al., 2003).

Research indicates many Vietnamese American women have misconceptions of breast and cervical cancer and many are unaware of cancer screening tests. Vietnamese women also report low levels of Pap screening, which subsequently results in much later diagnosis of the disease. One study among 352 Vietnamese women in Seattle revealed that 63% of participants had undergone Pap testing during the preceding three years (Taylor et al., 2004). Taylor and colleagues (2004) also examined Pap testing patterns associated with the healthcare system and physician factors, and found that women with a regular doctor were more likely to have been screened than those without a regular doctor. This demonstrates that physician-patient communication is important in increasing adherence to screening recommendations.

A survey of Vietnamese women in California found that only 30% had ever had a mammogram and only 53% a Pap test. Factors that were associated with having one or more of the tests included age (among women <40 years old), number of years in the U.S., having ever married, and having health insurance. Factors associated with not receiving a test included having a Vietnamese doctor, being unemployed, and being of Chinese-Vietnamese background. Improving use of cancer screening tests requires a two-prong approach directed at both Vietnamese consumers and Vietnamese doctors (McPhee et al., 1997).

Media campaigns can play a significant role in increasing Vietnamese women’s awareness of the importance of Pap tests. Such efforts are even more
effective with the use of lay health workers because they use their cultural knowledge and social networks to create change, as illustrated by a community-based participatory research study conducted in Santa Clara County, CA (Lam et al., 2003). Culture is also found to play a vital role in limiting cervical cancer screening behavior, so cultural barriers should be considered in designing health education programs for this population (Chilton et al., 2005). Offering culturally appropriate breast cancer education programs at a convenient location, specifically apartment complexes, have demonstrated significant changes in knowledge and attitudes about breast cancer among Vietnamese women in Houston (Yi & Luong, 2005).

California has a very established breast cancer early detection program (BCEDP program), including an 800 toll-free number made available in multiple languages: English, Spanish, Cantonese, Mandarin, Vietnamese, and Korean. A study examining the use of targeted advertising with role models demonstrated success in encouraging Asian Americans to call the 800 number and engage in a three-way translated call to qualify for free clinical breast exam and mammograms (Davis, 2003). Given that Asian Americans represent only 1.7% of all callers to the National Cancer Institute’s Cancer Information Service, targeted newspapers and radio advertisements in native languages should be considered in future educational campaigns for cancer screening programs as well as other efforts.

Rates of colorectal cancer screening among Vietnamese Americans are low compared to the White population. Physician recommendation was found to be the most important factor influencing previous screening and intention to be screened (Walsh et al., 2004).

**INFECTIONOUS DISEASES**

**HIV/AIDS & SEXUALLY TRANSMITTED DISEASES**

Yi (1998) conducted a survey of 412 Vietnamese American college students in Texas and found most were aware of the major modes of HIV transmission. Females were significantly more aware than males, though sexually active participants were less knowledgeable than those who were not sexually active. This awareness, however, was also coupled with many misconceptions, as respondents also reported being uncomfortable discussing HIV and safer sex concerns with their partners.

**TUBERCULOSIS (TB)**

Compliance with TB drug therapy depends not only on trust between a patient and provider, but also on the socio-cultural environment of the patient. In a study of Vietnamese American clients with courses of preventive drug therapy for inactive TB, three factors in particular were found to influence compliance or non-compliance: 1) cultural interpretations of the therapy’s side effects as “hot”; 2) the role of family members and peers; and 3) community perceptions of the drug treatment (Ito, 1999).

**HEPATITIS B**

Hepatitis B viral (HBV) infection is one of the most pressing public health issues among Vietnamese Americans. The rate of HBV among this group is over 10%, compared to the rate of less than one percent for the general population (Taylor et al., 2004). A major reason for this is Vietnam is a hyper-endemic (a high and continued incidence) area for HBV, and the majority of this population is foreign born (3 out of 4 people) (Taylor et al., 2005). Carriers of HBV are over 200 times more likely to develop liver cancer than non-carriers. Vietnamese men experience the highest liver cancer incidence rate (41.8 per 100,000) of any ethnic group in the nation (Burke et al., 2004). A number of studies have assessed the level of awareness, knowledge, and testing patterns among this population, and efforts are showing heightened awareness and improved health outcomes.

A survey of 1,508 Vietnamese households in three metropolitan U.S. areas found that rates of children having all three hepatitis B vaccinations ranged from 14% to 24% in Dallas, 10% to 26% in Houston, and 18% to 38% in Washington, D.C. These low immunization rates among children and adolescents warn of a generation which, too old to benefit from infant programs and school entry laws, could grow into adulthood without the protection of immunization (Jenkins, 2000).

McPhee and colleagues (2003) conducted a controlled trial of two public health outreach “catch-up” campaigns for hepatitis B vaccination targeting Vietnamese American children ages 3 to 18 residing in the Houston and Dallas metropolitan areas. One was a community mobilization and the other was a media education campaign. Results indicated that the media campaign significantly increased general awareness of hepatitis B and immunization than the community mobilization, as mass media reaches a broader audience. An economic analysis of the program also revealed that both programs proved to be cost-effective and cost-beneficial, although the community mobilization was to a lesser degree (Zhou et al., 2003).
Understanding the socio-cultural context and lived experiences among the Vietnamese American community are important elements to consider when developing educational materials for this population, as one study on Hepatitis B control intervention reported (Burke et al., 2004).

In a population-based survey on Hepatitis B testing among 345 Vietnamese American men in Seattle, results showed a relatively high rate (66%) of testing among the sample, (Taylor et al., 2004). Despite the encouraging findings, however, rates for certain subgroups, such as Vietnamese men without a regular source of care, remain low. Health education intervention programs should direct efforts towards men without a regular source of care as well as to physicians who serve Vietnamese communities.

In a recent study of 715 Vietnamese Americans in Seattle, researchers found high levels of awareness of hepatitis B, as more than four in five respondents (81%) reported ever having heard of the disease, with more than two-thirds reported previous HBV serological testing (Taylor et al., 2005). These are encouraging results indicating that educational campaigns targeting this immigrant community is making a positive impact.

**DOMESTIC VIOLENCE**
In a study of 30 Vietnamese women recruited from a civic association that serves Vietnamese women in Boston: 47% reported intimate physical violence sometime in their lifetime, 30% reported intimate physical violence in the past year (Tran, 1997).

**MATERNAL AND CHILD HEALTH**
The practice of breastfeeding, which provides immunological protection to infants, is uncommon among many Southeast Asian women. Evidence suggests that most Vietnamese women believe that formula-feeding was more popular in the U.S. and many believed formula-feeding to be healthier than breastfeeding (Tuttle et al., 1994).

In a descriptive correlational study examining maternal sensitivity (as measured by the mother’s sensitivity to her child’s communication), posttraumatic stress, and acculturation among 30 Hmong and Vietnamese mothers, results revealed that almost half (43%) were clinically depressed or anxious (Foss, 2001). Less acculturated mothers tended to be more anxious and depressed, while one third of the sample had considered suicide in the previous week. Clinical implications from this study suggest that nurses should incorporate screening for depression and anxiety into routine assessments or discharge planning for foreign-born mothers and make appropriate referrals for stressed mothers.

Qin and Gould (2006) conducted the first study ever to examine maternal risk factors and birth outcomes of major Asian ethnic subgroups in California, including Filipino, Chinese, Vietnamese, Korean, Cambodian/Laotian, and Japanese. Overall results indicated that Vietnamese experienced the second highest neonatal, post-neonatal, and infant mortality rates, after Cambodian/Laotians. Vietnamese women also had the highest (99.3%) foreign-born maternal place of birth among all API ethnic group comparisons. Medi-Cal, the federal Medicaid program in California, was the payer for delivery for 46.3% of all Vietnamese births.

**MENTAL HEALTH**
For Southeast Asians (Vietnamese, Cambodian and Lao), regardless of ethnicity and number years in the U.S., pre-migration trauma and refugee camp experiences were significant predictors of psychological distress even five years or more after migration. In addition, Vietnamese women may be more likely to experience distress than their male counterparts (Chung & Kagawa-Singer, 1993). Surveys of Vietnamese American men in San Francisco, Alameda, and Santa Clara County, and the city of Houston found that men who were the least proficient in English, poorer, unemployed or disabled, veterans and those living in Houston were more likely to be depressed (Hinton et al., 1998). Other studies indicate that Vietnamese middle school students were 1.5 times more likely than white students to report suicidal thoughts (Roberts et al., 1997).

In a study that compared personal goals and depression among Vietnamese American and European American college students, Vietnamese American students reported higher levels of depression and lower levels of goal self-concordance (defined as when goals are pursued for autonomous reasons) (Ong & Phinney, 2002).

**TOBACCO USE**
Tobacco use patterns vary widely among the API population, with Vietnamese Americans experiencing some of the highest rates. Data collected from 1999-2001 from the National Survey on Drug Use and Health reported a total prevalence of 26.5% (CDC, 2004). CDC’s REACH 2010 reported a 30.4% smoking prevalence for men and a 0.9% for women. Data from
the California Health Interview Survey indicated a smoking prevalence of 31.6% for Vietnamese men and 1.1% for Vietnamese women, and overall prevalence of 16.3% (Tang et al., 2005). California Vietnamese women reported the lowest smoking prevalence among other API ethnic group. A cross-sectional survey conducted in counties of Pennsylvania and New Jersey showed a 40.3% smoking rate among Vietnamese Americans sampled (Ma et al., 2003).

Brugge and colleagues (2002) conducted exploratory focus groups among Chinese and Vietnamese Americans in Boston in an effort to examine issues and generate message concepts related to secondhand smoke. Recommendations included using themes that were consistent with cultural values of each group, while also reflecting the groups' desire to adapt to American norms in constructing health education messages.

Using data from the California Health Interview Survey, Tang and colleagues (2005) documented an interaction between English proficiency and gender in differentiating smoking status among Asian American adults. English proficiency for Vietnamese and Koreans were the lowest, compared to Chinese, Filipinos, South Asians, and Japanese. The impact on gender revealed that Asian American women who reported higher English proficiency were more likely to smoke.

**NUTRITION, WEIGHT AND PHYSICAL ACTIVITY**

Compared to the overall proportion of overweight individuals in the population as a whole (57%), Vietnamese men and women had much lower rates of being overweight (17% and 9% respectively). However, among the foreign-born, the risks of being overweight or obese increases as more years are spent in the U.S. This may indicate that the proportion of overweight or obese individuals will increase with more U.S.-born Asian Americans as well as longer duration in the U.S (Lauderdale & Rathouz, 2000). CDC's REACH 2010 survey results showed that Vietnamese Americans were less likely (11.1%) to report consuming the daily recommended 5 servings of fruits and vegetables a day, and also less likely (14.3%) to meet physical activity recommendations, compared to the aggregate Asian population (32.1%) and the general US population (24.4%).

In a prevalence study of unhealthy behaviors among a cohort of 783 Vietnamese youths in four counties of California (San Francisco, Santa Clara, Los Angeles, Orange), health risk behaviors are common and inversely related to some school performance indicators (Kaplan et al., 2003). Health risk behaviors included adolescents’ reports of ever smoking, a sedentary lifestyle, lack of consumption of fruit and vegetables, consumption of foods high in fat, ever drinking alcohol, and engaging in sexual activity. Females were found to be significantly more sedentary than males. Females’ lack of participation in extracurricular activities was related to health-compromising behaviors. Grades as a variable was not a significant risk factor for girls, but for boys, those who reported achieving an average grade of B or better had a decreased risk of engaging in such health-compromising behaviors. A positive youth development program that was conducted among Vietnamese American youths in Oklahoma City proved to be a promising prevention strategy (Kegler et al., 2005), and one that can be adapted to other Vietnamese communities in an effort to address some of these aforementioned high risk behaviors.

California is home to a successful nutrition education campaign, *Five A Day*, a program that encourages consumption of five servings of fruits and vegetables a day. Recent additions to the program include campaigns that are directed towards Latinos and African Americans. At the time of this writing, there currently is no program in place that specifically targets Asian Americans. The state health department and UCLA researchers have, however, recently convened a group of low-income Chinese, Vietnamese, and Hmong Americans to explore knowledge, attitudes, dietary practices, and physical activity levels (Harrison et al., 2005). Results of the focus groups indicate that the maintenance of healthy traditional diets, education on mainstream US foods, and promoting active lifestyles are strategies to include in the creation of such a campaign.

**RESOURCES**

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

- National Alliance of Vietnamese American Service Agencies (NAVASA)
  [http://www.navasa.org/index.html](http://www.navasa.org/index.html)
- Southeast Asia Resource Action Center (SEARAC)
  [www.searac.org](http://www.searac.org)
  (202) 667-6449
- Ethnic Specific Health Care Beliefs and Practices
REFERENCES


Southeast Asia Resource Action Center, Vietnamese Refugees. Available at: [http://www.searac.org/vietref.html](http://www.searac.org/vietref.html)


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

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

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

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

Contributors
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