The Health of Asian Pacific Islander American Adults in California: 2001 and 2003

Michael Ken-Kou Lin, PhD, Gene Kazinets, PhD,
Susan Ivey, MD, MHSA, Joel M. Moskowitz, PhD

Center for Family and Community Health
School of Public Health
University of California, Berkeley
Berkeley, CA 94720-7360

September, 2006

This study was conducted by the UC Berkeley Center for Family and Community Health with guidance from the Korean American Community Advisory Board. Funding for this study was provided by the Centers for Disease Control and Prevention (Cooperative Agreement #U48/DP000033). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

Suggested Citation:

Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Correspondence or requests should be directed to the report's senior author: Joel M. Moskowitz, Ph.D., Director, Center for Family and Community Health; School of Public Health; University of California, Berkeley; 140 Warren Hall; Berkeley, CA 94720-7360; (510) 643-7314; jmm@berkeley.edu.

Table of Contents

Executive Summary …………………………………………………………… **4**

Introduction …………………………………………………………………… **9**
Methods ………………………………………………………………………… **9**

Results …………………………………………………………………………… **9**
APIAs vs. Other Adults in California ……………………………………… **10**
Chinese-Americans vs. Other APIAs in California ………………………… **12**
Filipino-Americans vs. Other APIAs in California ………………………… **13**
Japanese-Americans vs. Other APIAs in California ……………………… **15**
Korean-Americans vs. Other APIAs in California ………………………… **17**
South Asian-Americans vs. Other APIAs in California ……………………… **19**
Vietnamese-Americans vs. Other APIAs in California……………………… **21**
Group Differences by Indicator ……………………………………………… **23**

Appendix 1. Detailed Methods **30**

Appendix 2. Graphical Presentation of Group Differences by Indicator
URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-2003 Appendix 2.pdf

Executive Summary

This report examines health disparities among Asian Pacific Islander American (APIA) adults (18 years and older) in California based on the 2001 and 2003 California Health Interview Survey (CHIS). It summarizes differences in various health-related indicators between APIAs and other adults in California, and differences among the six largest APIA groups in California: Chinese-, Filipino-, Japanese-, Korean-, South Asian-, and Vietnamese-Americans. See Table 1 on pages 7-8 for a summary of these disparities.

Disparities between APIAs and other Adults in California

Sociodemographic factors. As compared to other Californians, APIAs as a group were more likely to be female, younger, married and more educated and have spent less time in the U.S.. APIAs as a group were less likely to be proficient in English.

Behavioral risk factors. As compared to other Californians, APIAs as a group were less likely to meet CDC criteria for physical activity, less likely to consume five daily servings of fruits and vegetables, and more likely to be sad. APIAs as a group were less likely to be overweight or obese, current or binge drinkers, or to report needing help for emotional or mental health problems, and females were less likely to be smokers.

Health care access and utilization. As compared to other Californians, APIAs as a group were more likely to rate their overall health as less than "great," and less likely to have Medicare or mental health insurance coverage. They were less likely to receive six clinical preventive screenings: colorectal, stool, bone density, PSA, Pap smears and mammograms. APIAs as a group were more likely to have health insurance coverage, dental coverage, a usual source of health care, and less likely to delay medical care or delay filling a prescription or to use an emergency room.

Chronic disease and disability. As compared to other Californians, APIAs as a group were less likely to report disability or chronic diseases including arthritis, asthma, heart disease, and cancer.

Disparities among the Major APIA Groups in California

A comparison of the six major APIA ethnic groups, Chinese-, Filipino-, Japanese-, Korean-, South Asian-, and Vietnamese-Americans, revealed differences in socio-demographic characteristics, behavioral risk factors, health care access and utilization, and chronic disease and disability.

Sociodemographic factors. We found few sociodemographic differences between Chinese- and Korean-Americans while South Asian- and Vietnamese-Americans differed from other APIA groups. As compared to other APIAs, Chinese-Americans were more

likely to live in poverty, and less likely to be proficient in English. Korean-Americans were more likely to have lower household incomes and less likely to be proficient in English. South Asian-Americans boasted a favorable profile in terms of education, employment, income, and English proficiency, while Vietnamese-Americans appeared to face many challenges in these areas. Filipino-Americans and Japanese-Americans had slightly higher household incomes, were more likely to be married and be proficient in English, and have been in the U.S. longer.

Behavioral risk factors. As compared to other APIAs, Chinese-Americans were less likely to engage in physical activity and cigarette smoking. Filipino-Americans were more likely to be overweight and less likely to consume five daily servings of fruits and vegetables. Korean-Americans were less likely to be overweight or obese but were more likely to engage in binge drinking (5 or more drinks per occasion) and smoke cigarettes. Japanese-Americans were more likely to be overweight or obese but had greater food security and were more likely to meet CDC's criteria for physical activity. Japanese-American women had the highest alcohol consumption among APIA females. South Asian-Americans were most likely to consume five daily servings of fruits and vegetables but had above average rates of overweight and obese adults. Vietnamese-Americans were less likely to be overweight or obese but were less likely to meet CDC's criteria for physical activity. Vietnamese-Americans were more likely to report feeling sad and to have received help for emotional or mental health problems. Vietnamese-American females reported lower alcohol consumption and cigarette smoking compared to other APIA females.

Health care access and utilization. Disparities in health insurance coverage and use of health services were found across APIA groups. As compared to other APIAs, Chinese-Americans were less likely to have insurance coverage for eye exams and mental health services. Filipino-Americans were more likely to have a usual source of care and dental care benefits, reported more physician visits and less delayed care, and rated their overall health care higher. Japanese-Americans reported greater health care access and utilization, especially use of clinical preventive services (colorectal, stool, bone density, and PSA). Korean-Americans were least likely to have health and dental insurance coverage and used less health care. South Asian-Americans were above average in physician visits and insurance coverage, but suffered from low use of clinical preventive services, were more likely to delay medical care and were less likely to fill prescriptions. Vietnamese-Americans were less likely to have health insurance coverage and affordable dental care and least likely to have mental health insurance coverage.

Chronic disease and disability. Disparities were found across APIA groups in the reported prevalence of chronic diseases. In general, Chinese-, Korean-, and South Asian-Americans had average or favorable profiles, while Filipino- and Japanese-Americans had less favorable profiles. As compared to other APIAs, Chinese-Americans were less likely to have arthritis, high blood pressure, and diabetes. Korean-Americans were less likely to have arthritis, asthma and high blood pressure. South Asian-Americans were less likely to have high blood pressure and cancer, but more likely to have arthritis. Filipino-Americans were more likely to have asthma, high blood pressure, and diabetes,

and Japanese-Americans were more likely to have asthma, heart disease, diabetes, and cancer. Vietnamese-Americans were more likely to have high blood pressure and heart disease, but less likely to have cancer.

The study has two overall implications for APIA health in California. First, although APIA adults as a group have better access to health care compared to other adults in California, they are less likely to receive many preventive screenings. Thus, APIAs may be more likely to have undiagnosed diseases which could increase their risk of serious health consequences and mortality. Second, the health disparities found among APIA subgroups demonstrate the importance of collecting health data on specific APIA subgroups because the health conditions and needs of these groups differ substantially. For example, overall APIAs are less likely to smoke cigarettes than other adults in California. However, among females the percentage of current smokers ranges from 1.6% for Vietnamese-Americans to 15.4% for Japanese-Americans (vs. 14.3% for non-APIA females), and among males the percentage of current smokers ranges from 14.9% for Chinese-Americans to 35.4% for Korean-Americans (vs. 20.2% among non-APIA males). These health disparities suggest the need for programs that are culturally-sensitive and linguistically-appropriate and targeted to specific APIA subgroups.

Table 1. Disparities between Asian Pacific Islander American (APIA) Adults vs. Other California Adults and among Six Major APIA Groups vs. All APIAs: California Health Interview Survey, 2001 and 2003

Indicator	APIA	Chinese	Filipino	South Asian	Japanese	Korean	Vietnamese
Age	+	ND	ND	+	--	ND	ND
Education	+	ND	ND	++	ND	ND	--
Employment	ND	ND	+	+	--	-	-
Household income	ND	ND	+	++	+	ND	--
Poverty	ND	-	+	+	++	ND	--
Marital status	+	ND	ND	++	ND	+	--
Time in the US	-	ND	+	--	++	ND	-
English proficiency	-	-	+	++	+	--	--
English spoken at home	-	--	+	+	++	-	--
Self-rated health status	ND	ND	ND	++	++	-	--
Overweight	+	+	--	-	-	+	++
Obese	+	+	ND	-	-	++	+
Physical activity	-	--	ND	ND	+	ND	--
Food security	+	ND	ND	ND	+	ND	--
Five servings of fruits and vegetables per day	-	ND	-	++	ND	+	ND
Current drinker (males)	+	ND	ND	ND	ND	--	ND
Average number of drinks (males)	+	+	ND	+	ND	--	ND
Binge drinker (males)	+	ND	-	++	ND	--	+
Current drinker alcohol (females)	+	ND	ND	ND	--	-	++
Average number of drinks (females)	+	ND	ND	-	--	ND	++
Binge drinker (females)	+	ND	ND	ND	ND	-	++
Current smoker (males)	ND	+	ND	+	ND	--	--
Current smoker (females)	+	+	-	ND	--	-	++
Received help for emotional / mental health problems	+	ND	ND	ND	ND	ND	-
Sad	-	ND	ND	ND	+	ND	--
Usual source of care	ND	ND	+	ND	ND	--	ND
Delayed medical care	+	ND	++	-	++	--	ND
Delayed prescription	+	ND	ND	-	ND	+	ND
Physician visit in past year	ND	ND	+	+	ND	-	ND
Emergency room visit in past year	-	ND	-	ND	--	+	ND
Health care rating	-	ND	+	-	+	-	ND

++ = favorable difference; + = somewhat favorable difference; ND = No Difference; - = somewhat unfavorable difference; -- = unfavorable difference

Table 1 (cont.). Disparities between Asian Pacific Islander American (APIA) Adults vs. Other California Adults and among Six Major APIA Groups vs. All APIAs: California Health Interview Survey, 2001 and 2003

Indicator	APIA	Chinese	Filipino	South Asian	Japanese	Korean	Vietnamese
Uninsured part or all of past year	+	ND	ND	+	+	--	-
Currently insured (18-64 years)	+	ND	ND	+	+	--	-
HMO enrollment (among currently insured)	+	ND	+	ND	ND	-	ND
Managed care plan enrollment (among currently insured)	+	ND	ND	ND	-	--	+
Medicare enrollment (≥ 65 years)	-	ND	ND	--	ND	ND	ND
Dental care affordability	+	ND	+	ND	++	-	-
Dental coverage	+	ND	++	ND	ND	--	ND
Eye exam benefits	ND	-	ND	ND	ND	-	+
Mental health coverage	-	-	ND	+	ND	ND	--
Flu shot (≥ 65 years)	+	ND	ND	--	ND	ND	ND
Colorectal screening past 2 years (≥ 40 years)	-	ND	ND	--	+	ND	ND
Stool test past 2 years (≥ 50 years)	-	ND	ND	ND	+	-	ND
Bone density test (females ≥ 50 years)	-	ND	ND	ND	+	ND	-
PSA test (males ≥ 50 years)	-	ND	ND	ND	+	--	--
Hysterectomy (females ≥ 40 years)	-	ND	ND	ND	ND	ND	ND
Pap test in past 3 years (females)	-	ND	+	ND	ND	-	ND
Mammogram in past 2 years (females ≥ 40 yrs.)	-	ND	ND	ND	ND	--	ND
Usual source of care (among diabetics)	ND	ND	ND	-	+	ND	ND
Difficulty understanding physician	ND	ND	+	+	+	ND	-
Arthritis	+	+	ND	-	ND	+	ND
Asthma	+	ND	--	ND	--	+	ND
High blood pressure	ND	+	--	+	-	+	-
Heart disease	+	ND	ND	ND	ND	ND	-
Diabetes	ND	+	-	ND	-	ND	ND
Cancer	+	ND	ND	++	-	ND	+
Non-skin cancer	+	ND	ND	++	-	ND	+
Skin cancer	+	ND	ND	ND	ND	ND	ND
Needs special equipment for disability	+	ND	ND	ND	ND	ND	ND

++ = favorable difference; + = somewhat favorable difference; ND = No Difference; - = somewhat unfavorable difference; -- = unfavorable difference

The Health of Asian Pacific Islander American Adults in California: 2001 and 2003

California has the largest Asian Pacific Islander American (APIA) population in the United States. In July, 2005, the U.S. Census Bureau estimated that there were more than 5.1 million APIAs in California, which represented more than 14% of the state's overall population. According to the 2000 Census, the largest APIA groups in California were Filipino- (3.2% of overall population), Chinese- (3.1%), Vietnamese- (1.4%), Japanese- (1.2%), Korean- (1.1%) and Asian Indian- Americans (1.1%).

This report examines health disparities among APIA adults (18 years and older) in California based on the 2001 and 2003 California Health Interview Survey (CHIS). The CHIS provides a comprehensive perspective on the health of Californians in the 21st century. This statewide, population-based, telephone survey of California residents is conducted every other year. The survey is administered in multiple languages with a large representative sample of adults 18 years of age and older, thereby allowing comparisons across major ethnic groups.

Methods

Data from the 2001 and 2003 CHIS were obtained in 2005 from the CHIS Web site (www.chis.ucla.edu). Where measures are comparable across years, the reported frequencies were based on two years of data. Where a measure was assessed in only one year, the reported frequency applies to that year. In order to adjust for differences in the age and sex composition of the APIA groups, the data were standardized to resemble the full sample of adult CHIS respondents. In order to generalize the findings of the survey samples to the entire California adult population, first a weighting scheme and sampling method were devised, and second, the appropriate statistical software and analyses were employed. **Appendix 1** provides more detailed description of the methodology including a description of each measure included in the report.

We combined data from 2001 and 2003 whenever possible to obtain more precise estimates because we found few significant differences across years. To control for differences in the age and sex composition of each group, all analyses, with the exception of sociodemographic comparisons, were adjusted for age and sex, as appropriate.

Results

First, disparities between APIA and other adults in California are summarized. Second, each of the six largest APIA groups (Chinese-American, Filipino-American, Japanese-American, Korean-American, South Asian-American, and Vietnamese-American) is contrasted with all other APIAs to identify disparities among APIA groups. Third, disparities are summarized by indicator. A graphic presentation of the results for each indicator is also available as a set of bar charts (see **Appendix 2).**

Asian Pacific Islander American (APIA) Adults in California
Disparities with Other Adults in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between Asian Pacific Islander Americans (APIAs) and other adults in California. The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that APIAs tended to fare better than non-APIAs, and a negative sign (-) indicates that APIAs tended to fare worse than non-APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

Sex – higher % females (53.0%)
+ Age – higher % between 18 and 34 years of age (37.0%)
+ Education – higher % college graduates (54.7%)
+ Marital status – higher % married (62.1%)
- Time in US – lower % living in US 15 or more years (62.3%)
- English proficiency - higher % speaks English not well/ not at all (25.7%)
- English spoken at home – lower (68.3%)

Behavioral Risk Factors

+ Overweight (BMI ≥ 25) – lower (32.5%)
+ Obese (BMI ≥ 30) – (6.3%)
+ Food security – higher (92.3%)
- Five fruits and vegetables per day – lower (44.5%)
- Physical activity – lower % meets CDC criteria (20.2%)
+ Current drinker (males) – lower (57.5%)
+ Average number of drinks (males) – lower (7.9)
+ Binge drinker (males) – lower (15.0%)
+ Current drinker (females) – lower (32.3%)
+ Average number of drinks (females) – lower (2.1)
+ Binge drinker (females) – lower (4.0%)
- Current smoker (males) – higher (21.6%)
+ Current smoker (females) – lower (6.2%)
+ Emotional / mental health problems – lower (8.5%)
- Sad – higher (26.8%)

Health Care Access and Utilization

+ Usual source of care – higher (86.9%)
+ Delayed care in past year – lower (10.8%)
+ Delayed obtaining prescription in past year – lower (7.0%)
+ Emergency room visit in past year – lower (11.8%)
- Health care rating – higher % less than great (35.8%)
+ Uninsured part or all of past year – lower (18.4%)
+ Currently insured (18-64 years) – higher (83.8%)
+ HMO enrollment – higher (60.6%)
+ Managed care plan enrollment – higher (67.7%)
- Medicare enrollment (65+ years) – lower (89.7%)
+ Dental care not affordable – lower (15.7%)
+ Dental coverage – higher (64.6%)
- Mental health coverage – lower (76.4%)
+ Flu shot in past year (≥ 65 years) – higher (74.6%)
- Colorectal screening in past 2 years (≥ 40 years) – lower (28.5%)
- Stool test in past 2 years (≥ 50 years) – lower (22.6%)
- Bone density test (females ≥ 50 years) – lower (29.2%)
- PSA test ever (males ≥ 50 years) – lower (68.7%)
- Hysterectomy (females ≥ 40 years) – lower (15.0%)
- Pap test in past 3 years (females) – lower (71.9%)
- Mammogram in past 2 years (females ≥ 40 years) – lower (70.1%)

Chronic Disease and Disability

+ Arthritis – lower (11.9%)
+ Asthma – lower (9.1%)
+ Heart disease – lower (5.3%)
+ Cancer – lower (2.9%)
+ Cancer (non-skin) – lower (2.7%)
+ Cancer (skin) – lower (0.2%)
+ Needs special equipment due to disability- lower (3.4%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Chinese-Americans in California
Disparities with Other Asian Pacific Islander Americans in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between Chinese-American and five other major Asian Pacific Islander American (APIA) groups (Filipino, Japanese, Korean, South Asian, and Vietnamese-American). The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that Chinese-Americans tended to fare better than other APIAs, and a negative sign (-) indicates that Chinese-Americans tended to fare worse than other APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

- Poverty status – 2nd highest % below Federal poverty level (15.7%)
- English proficiency – 3rd highest % speaks English not well/ not at all (37.4%)
- English spoken at home – 2nd lowest % (52.6%)

Behavioral Risk Factors

+ Overweight (BMI ≥ 25) – 3rd lowest % (26.8%)
- Physical activity – 2nd lowest (15.5%)
+ Average number of drinks (males) – lowest (5.8)
+ Current smoker (males) – lowest (14.9%)
+ Current smoker (females) – 2nd lowest (3.9%)

Health Care Access and Utilization

- Mental health Coverage – 3rd lowest (72.8%)

Chronic Disease and Disability

+ Arthritis – 2nd lowest (10.8%)
+ High blood pressure – 3rd lowest (17.4%)
+ Diabetes – lowest (3.9%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Filipino-Americans in California
Disparities with Other Asian Pacific Islander Americans in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between Filipino-American and five other major Asian Pacific Islander American (APIA) groups (Chinese, Japanese, Korean, South Asian, and Vietnamese-American). The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that Filipino-Americans tended to fare better than other APIAs, and a negative sign (-) indicates that Filipino-Americans tended to fare worse than other APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

+ Employment – 2nd lowest % not employed (28.5%)
+ Household income – 2nd lowest % earning less than $20K per year (14.8%)
+ Poverty status – 3rd highest % more than 200% Federal Poverty Line (74.0%)
+ Time in US – 2nd highest % living in US more than 15 years (69.9%)
+ English proficiency – 3rd lowest % speaks English not well/ not at all (7.0%)
+ English spoken at home – 3rd highest (82.7%)

Behavioral Risk Factors

- Overweight (BMI ≥ 25) – highest (42.3%)
- Five fruits and vegetables per day – lowest (37.9%)
- Binge drinker (males) – 2nd highest (20.6%)
- Current smoker (females) – 3rd highest (7.6%)

Health Care Access and Utilization

+ Usual source of care – highest (92.2%)
+ Delayed care in past year – 2nd lowest (7.3%)
+ Physician visit in past year – highest (84.5%)
- Emergency room visit in past year – 2nd highest (14.3%)
+ Health care rating – lowest % less than great (26.5%)
+ Currently insured (18-64 years) – 3rd highest (88.7%)
+ HMO enrollment – highest (69.5%)
+ Dental care not affordable – 2nd lowest (12.3%)
+ Dental coverage – highest (74.4%)
+ Pap test in past 3 years (females) – highest (81.8%)
+ Difficulty understanding physician – 2nd lowest (1.9%)

Chronic Disease and Disability

- Asthma – 2nd highest (13.0%)
- High blood pressure – highest (28.2%)
- Diabetes - highest (8.6%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Japanese-Americans in California
Disparities with Other Asian Pacific Islander Americans in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between Japanese-American and five other major Asian Pacific Islander American (APIA) groups (Filipino, Japanese, Korean, South Asian, and Vietnamese-American). The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that Japanese-Americans tended to fare better than other APIAs, and a negative sign (-) indicates that Japanese-Americans tended to fare worse than other APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

Sex – highest % females (59.5%)
- Age – highest over the age of 65 (35.0%), lowest below the age of 35 (20.0%)
- Employment – highest % not employed (47.0%)
+ Household income – 2nd highest earning more than $100,000 per year (26.0%)
+ Poverty status – lowest % living below Federal poverty level (5.8%)
+ Time in US – highest % living in US 15 or more years (90.8%)
+ English proficiency well – 3rd lowest % speaks English not well/ not at all (9.1%)
+ English spoken at home – highest (94.9%)

Behavioral Risk Factors

+ Self-rated health – highest % good / excellent (90.8%)
- Overweight (BMI ≥ 25) – 2nd highest (37.2%)
- Obese (BMI ≥ 30) – 2nd highest (9.3%)
+ Food Security – highest (97.2%)
+ Physical activity – highest % meets CDC criteria (29.4%)
- Current drinker (females) – highest (46.6%)
- Average number of drinks (females) – 2nd highest (3.8)
- Current smoker (females) – highest (15.4%)
+ Sad – lowest (16.9%)

Health Care Access and Utilization

+ Delayed care in past year – lowest (7.0%)
- Emergency room visit in past year – highest (17.2%)
+ Health care rating – 2nd lowest % less than great (27.5%)
+ Uninsured part or all of past year – 2nd lowest (11.3%)

+ Currently insured – 2nd highest (92.4%)
+ Currently insured (18-64 years) – 2nd highest (91.1%)
- Managed care plan enrollment – 2nd lowest (58.7%)
+ Dental care not affordable – lowest (6.0%)
+ Colorectal screening in past 2 years (≥ 40 years) – highest (33.6%)
+ Stool test (≥ 50 years) – highest (29.0%)
+ Bone density test (females ≥ 50 years) – highest (43.9%)
+ PSA test (males ≥ 50 years) – highest (79.3%)
+ Difficulty understanding physician – 3rd lowest (2.3%)

Chronic Disease and Disability

- Asthma – highest (14.7%)
- High blood pressure – 2nd highest (23.9%)
- Cancer – highest (4.6%)
- Non-skin cancer – highest (4.1%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Korean-Americans in California
Disparities with Other Asian Pacific Islander Americans in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between Korean-American and five other major Asian Pacific Islander American (APIA) groups (Chinese, Filipino, Japanese, South Asian, and Vietnamese-American). The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that Korean-Americans tended to fare better than other APIAs, and a negative sign (-) indicates that Korean-Americans tended to fare worse than other APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

Sex – 2nd highest % females (57.3%)
- Employment – 3rd highest not employed (41.1%)
+ Marital status – 2nd highest % married (65.0%)
- English proficiency– 2nd highest % speaks English not well/ not at all (43.3%)
- English spoken at home – 3rd lowest (61.5%)

Behavioral Risk Factors

- Self-rated health – 2nd lowest % good / excellent (78.8%)
+ Overweight (BMI ≥ 25) – 2nd lowest (24.8%)
+ Obese (BMI ≥ 30)- lowest (2.2%)
+ Five fruits and vegetables per day – 2nd highest (52.5%)
- Current drinker (males) – highest (68.1%)
- Average number of drinks (males) – highest (13.2%)
- Binge drinker (males) – highest (26.5%)
- Current drinker (females) – 2nd highest (39.2%)
- Binge drinker (females) – highest (8.1%)
- Current smoker (males) – highest (35.4%)
- Current smoker (females) – 2nd highest (8.5%)

Health Care Access and Utilization

- Usual source of care – lowest (70.5%)
- Delayed care in past year – highest (18.8%)
+ Delayed prescription – lowest (5.7%)
- Physician visit in past year – lowest (70.2%)
+ Emergency room visit in past year – lowest (7.5%)

- Health care rating – highest % less than great (44.4%)
- Uninsured part or all of past year – highest (36.8%)
- Currently insured – lowest (68.8%)
- Currently insured (18-64 years) – lowest (63.5%)
- HMO enrollment – lowest (48.9%)
- Managed care enrollment – lowest (49.1%)
- Dental care not affordable – 2nd highest (19.9%)
- Dental coverage – lowest (39.6%)
- Eye exam benefits – lowest (73.3%)
- Stool test in past 2 years (≥ 50 years) – lowest (15.1%)
- PSA test (males ≥ 50 years) – 2nd lowest (57.5%)
- Pap test in past 3 years (females) – lowest (64.1%)
- Mammogram in past 2 years (females ≥ 40 years) – lowest (56.3%)

Chronic Disease and Disability

+ Arthritis – lowest (8.0%)
+ Asthma – lowest (4.9%)
+ High blood pressure – 2nd lowest (17.2%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

South Asian-Americans in California
Disparities with Other Asian Pacific Islander Americans in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between South Asian-American and five other major Asian Pacific Islander American (APIA) groups (Chinese, Filipino, Japanese, Korean, and Vietnamese-American). The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that South Asian-Americans tended to fare better than other APIAs, and a negative sign (-) indicates that South Asian-Americans tended to fare worse than other APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

Sex – lowest % females (40.3%)
+ Education – highest % college graduates (79.4%)
+ Employment – lowest % not employed (28.4%)
+ Household Income – highest earning more than $100,000 per year (31.8%)
+ Poverty status – 2nd lowest living below Federal poverty level (6.1%)
+ Marital status – highest % married (73.5%)
- Time in US – lowest % living in US 15 or more years (39.0%)
+ English proficiency well – lowest % speaks English not well/ not at all (2.9%)
+ English spoken at home – 2nd highest (85.1%)

Behavioral Risk Factors

+ Self-rated health – 2nd highest % good / excellent (87.2%)
- Overweight (BMI ≥ 25) – 3rd highest (37.0%)
- Obese (BMI ≥ 30) - highest (9.6%)
+ Five fruits and vegetables – highest (57.8%)
+ Average number of drinks – 2nd lowest (6.5)
+ Binge drinker (males) – lowest (6.2%)
- Average number of drinks – highest (4.8)
+ Current smoker (males) – 2nd lowest (15.0%)

Health Care Access and Utilization

- Delayed care in past year – 2nd highest (15.6%)
- Delayed obtaining prescription in past year – highest (9.5%)
+ Physician visit in past year – 2nd highest (83.6%)
- Health care rating – 2nd highest % less than great (43.1%)

+ Uninsured part or all of past year – lowest (10.7%)
+ Currently insured – highest (92.7%)
+ Currently insured (18-64 years) – highest (91.4%)
- Medicare enrollment (65+ years) – lowest (67.3%)
+ Mental health coverage – highest (85.9%)
- Flu shot in past year (≥ 65 years) – lowest (53.4%)
- Colorectal screening in past 2 years (≥ 40 years) – lowest (18.3%)
+ Difficulty understanding physician– lowest (1.5%)

Chronic Disease and Disability

- Arthritis – highest (15.1%)
+ High blood pressure – lowest (17.1%)
+ Cancer – lowest (0.3%)
+ Cancer (non-skin) – lowest (0.2%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Vietnamese-Americans in California
Disparities with Other Asian Pacific Islander Americans in California
California Health Interview Survey, 2001 and 2003

The following summary identifies disparities in health-related indicators (age- and/or sex-adjusted) between Vietnamese-American and five other major Asian Pacific Islander American (APIA) groups (Chinese, Filipino, Japanese, Korean, and South Asian-American). The sample includes adults (≥ 18 years of age) that resided in California in 2001 and 2003. A plus sign (+) indicates that Vietnamese-Americans tended to fare better than other APIAs, and a negative sign (-) indicates that Vietnamese-Americans tended to fare worse than other APIAs. Age- and/or sex-adjusted prevalences appear in parentheses for each indicator.

Sociodemographics

Sex – 2nd lowest % females (49.4%)
- Education – lowest % college graduates (31.7%)
- Employment – 2nd highest % not employed (43.7%)
- Household income – lowest % earning more than $100,000 per year (11.2%)
- Poverty status – highest % living below Federal poverty level (32.8%)
- Marital status – lowest % married (57.2%)
- Time in US – 2nd lowest % living in US 15 or more years (46.9%)
- English proficiency – highest % speaks English not well/ not at all (49.8%)
- English spoken at home – lowest (45.4%)

Behavioral Risk Factors

- Self-rated health– lowest % good / excellent (57.0%)
+ Overweight (BMI ≥ 25) – lowest (22.5%)
+ Obese (BMI ≥ 30) – 2nd lowest (4.5%)
- Food Security – lowest (80.3%)
- Physical activity – lowest % meets CDC criteria (14.9%)
+ Binge drinker (males) – 2nd lowest (11.5%)
+ Current drinker (females) – lowest (18.8%)
+ Average number of drinks (females) – lowest (0.7)
+ Binge drinker (females) – lowest (0.5%)
- Current smoker (males) – 2nd highest (31.8%)
+ Current smoker (females) – lowest (1.6%)
- Emotional or mental health problems – highest (13.6%)
- Sad – highest (43.0%)

Health Care Access and Utilization

- Uninsured part or all of past year – 2nd highest (23.6%)
- Currently insured (18-64 years) – 2nd lowest (78.9%)
+ Managed care plan enrollment – highest (75.0%)
- Dental care not affordable – highest (20.3%)
+ Eye exam benefit – highest (85.3%)
- Mental health coverage – lowest (62.9%)
- Bone density test (females ≥ 50 years) – lowest (16.3%)
- PSA test ever (males ≥ 50 years) – lowest (54.5%)
- Difficulty understanding physician – highest (11.5%)

Chronic Disease and Disability

- High blood pressure – 3rd highest (22.4%)
- Heart disease – highest (7.3%)
+ Cancer – 2nd lowest (1.2%)
+ Cancer (non-skin) – 2nd lowest (1.0%)

From: Lin, M.K., Kazinets, G., Ivey, S., Moskowitz, J.M. *The Health of Asian Pacific Islander American Adults in California: 2001 and 2003*. Berkeley, CA: Center for Family and Community Health, University of California at Berkeley.September, 2006. URL: http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-03 report.pdf .

Asian Pacific Islander Americans in California
Group Differences by Indicator

Sociodemographics

Sex. The percentage of females among APIAs was similar to non-APIAs. Among APIA groups, South Asians had the lowest percentage of females, and Japanese, the highest percentage (40.9% vs. 59.5%).

Age. APIAs had a similar age distribution as non-APIAs. Among APIA groups, South Asians had the youngest population, and Japanese, the oldest (52.5% vs. 20.0% in the 18 to 34 year age range).

Education. APIAs were more likely to have a college degree (54.7% vs. 35.9%), and less likely to have less than a high school education (12.3% vs. 21.4%). Among APIAs, South Asians are most likely to be college graduates, and Vietnamese, least likely (79.4% vs. 31.7%).

Employment. APIAs and non-APIAs had similar employment status. Among APIAs, Japanese were least likely to be employed, while South Asians and Filipinos were most likely to be employed. Koreans had the highest rate of self-employment, nearly double the next highest group, Japanese (19.0% vs. 9.6%).

Income. APIAs and non-APIAs had similar income distributions. Among APIAs, South Asians were most likely to have an annual household income above $100,000, and Vietnamese, least likely (31.8% vs. 11.2%).

Poverty Status. APIAs were about as likely to be living below the Federal poverty level (FPL) as non-APIAs (14.4% vs. 15.5%). Among APIAs, South Asians (68.9%) and Japanese (68.8%) were most likely to have had a household income more than three times the FPL, and Vietnamese were least likely. Moreover, almost one-third of Vietnamese had a household income less than the FPL (32.8%).

Marital Status. APIAs were more likely than non-APIAs to be married (62.1% vs. 53.9%). Each APIA subgroup had a higher percentage married than non-APIAs. Among APIAs, South Asians were most likely to be married, and Vietnamese, least likely (73.5% vs. 57.2%).

Time in U.S. APIAs were more likely than non-APIAs to have lived in the U.S. less than five years (11.0% vs. 3.0%). Among APIAs, South Asians were most likely to have lived in the U.S. less than five years, and Japanese, least likely (25.7% vs. 4.5%).

English Proficiency. APIAs were somewhat more likely than non-APIAs to report that they do not speak English well or not at all (25.7% vs. 22.5%). Among APIAs, South Asians were least likely to report difficulty speaking English (2.9%), while Vietnamese

were most likely to report difficulty (2.9% vs. 49.8%). Koreans and Chinese also (43.3% vs. 37.4%) were more likely to have difficulty speaking English than non-APIAs.

English Spoken at Home. APIAs were less likely than non-APIAs to indicate that English was spoken in their home (68.3% vs. 87.6%), but there is substantial variation among APIA subgroups. Among APIAs, while approximately half of Vietnamese (45.4%) and Chinese (52.6%) indicated that English was spoken at home, nearly all (94.9%) Japanese spoke English at home.

Behavioral Risk Factors

Self Rated Health. APIAs were as likely to report having good or excellent health as non-APIAs. Among APIAs, Japanese were most likely to report that their health was good or excellent, and Vietnamese, least likely (90.8% vs. 57.0%).

Overweight. APIAs were less likely than non-APIAs to be overweight (32.5% vs. 58.2%). Among APIAs, Vietnamese were least likely to be overweight (22.5%), and Filipinos, most likely (42.3%).

Obese. APIAs were less likely than non-APIAs to be obese (6.3% vs. 21.7%). Among APIAs, Koreans were least likely to be obese (2.2%) while South Asians and Japanese were most likely to be obese (9.6%, 9.3%).

Physical Activity. APIAs were less likely than non-APIAs to have met the CDC physical activity criteria (20.2% vs. 27.0%). Among APIAs, Vietnamese were least likely to have met the criteria (14.9%), and Japanese, most likely (29.4%).

Adequate Food Security. APIAs were more likely than non-APIAs to have adequate food security (92.3% vs. 88.6%). Vietnamese were less likely than other APIA groups to have adequate food security (80.3%).

Consumption of 5 Servings of Fruit and Vegetables Per Day. APIAs were less likely than non-APIAs to have consumed 5 daily servings of fruit and vegetables (44.5% vs. 51.3%). Among APIAs, Filipinos were least likely and South Asians most likely to have consumed 5 daily servings of fruit and vegetables (37.9% vs. 57.8%).

Current Drinker among Males. APIA males were less likely than non-APIA males to have consumed alcohol in the past 30 days (57.5% vs. 67.6%). Korean males were more likely than other APIA males to report drinking alcohol (68.1%).

Average Number of Drinks among Males. On average, APIA males consumed fewer alcoholic drinks in the past 30 days than non-APIA males (7.9 vs. 17.4). Among APIA males, Chinese averaged the fewest number of alcoholic drinks (5.8) while Koreans averaged the most (13.2).

Binge Drinker among Males. APIA males were less likely than non-APIA males to have a binge drinking (> 5 drinks) episode in the past 30 days (15.0% vs. 25.0%), but there was substantial variation among APIA subgroups. Korean males were most likely to report binge drinking (26.5%) and South Asian males, least likely (6.2%).

Current Drinker among Females. APIA females were less likely than non-APIA females to have consumed alcohol in the past 30 days (32.3% vs. 51.4%). Among APIA subgroups, Vietnamese females were least likely to report drinking alcohol (18.8%), and Japanese females, most likely (46.6%).

Average Number of Drinks among Females. APIA females consumed fewer alcoholic drinks on average in the past 30 days than non-APIA females (2.1 vs. 6.4). Among APIA subgroups, Vietnamese females had the lowest average (2.1), and South Asian females, the highest average (4.8).

Binge Drinker among Females. APIA females were less likely than non-APIA females to report a binge drinking (>5 drinks) episode in the past 30 days (4.0% vs. 7.5%). Among APIA subgroups, Vietnamese females were least likely (0.5%) to report a recent binge drinking episode, and Korean females, most likely (8.1%).

Current Smoker among Males. APIA males were as likely to be current smokers as non-APIA males. Among APIA subgroups, Chinese (14.9%) and South Asian (15.0%) males were least likely to be current smokers, and Korean males, most likely (35.4%).

Current Smoker among Females. APIA females were less likely than non-APIA females to be current smokers (6.2% vs. 14.3%). Among APIA subgroups, Vietnamese females were least likely to be current smokers (1.6%), and Japanese females, most likely (15.4%).

Need Help for Emotional or Mental Health Problems. APIAs were less likely than non-APIAs to report needing help for mental or emotional problems (8.5% vs. 16.0%). Among APIAs, Vietnamese were most likely to report needing help for mental or emotional problems (13.5%), and Koreans, least likely (6.9%).

Feeling Sad Most or All of the Time. APIAs were more likely than non-APIAs to feel sad most or all of the time (26.8% vs. 21.0%). Among APIAs, Japanese were least likely to report feeling sad most or all of the time (16.9%), and Vietnamese, most likely (43.0%).

Health Care Access and Utilization

Usual Source of Care. APIAs were as likely to have a usual source of care as non-APIAs (86.9% vs. 85.9%). Among APIAs, Koreans were least likely to have a usual source of care (70.5%), and Filipinos, most likely (92.2%).

Delayed Care. APIAs were less likely than non-APIAs to have delayed care in the past year (10.8% vs. 14.4%). Among APIAs, Japanese were least likely to have delayed care (7.0%), and Koreans, most likely (18.8%).

Delayed Prescription. APIAs were less likely than non-APIAs to have delayed obtaining a prescription during the past year (7.0% vs. 10.7%). Among APIAs, South Asians were most likely to have delayed obtaining a prescription (9.5%), and Koreans, least likely (5.7%).

Physician Visit During Past Year. APIAs were less likely than non-APIAs to have a physician visit during the past year (79.6% vs. 82.1%). Among APIAs, Filipinos were most likely to have visited a physician (84.5%), and Koreans, least likely (70.2%).

Emergency Room Visit in Past Year. APIAs were less likely than non-APIAs to have visited an emergency room during the past year (11.8% vs. 18.5%). Among APIAs, Koreans were least likely to have visited an emergency room (7.5%), and Japanese, most likely (17.2%).

Health Care Rating. APIAs were more likely than non-APIAs to rate their health care as less than "great" (35.8% vs. 27.7%). Among APIAs, Koreans were most likely to rate their health care as less than "great" (44.4%), and Filipinos, least likely (26.5%).

Uninsured During Part or All of Past Year. APIAs were less likely than non-APIAs to have been uninsured during part or all of the past year (18.4% vs. 22.7%). Among APIAs, South Asians were least likely to have been uninsured (10.7%), and Koreans, most likely (36.8%).

Currently Insured. APIAs were more likely than non-APIAs to report current health insurance coverage (85.8% vs. 83.1%). Among APIAs, South Asians were most likely to be insured (92.7%), and Koreans, least likely (68.8%).

Currently Insured among Adults less than 65 Years of Age. Among adults less than 65 years of age, APIAs were more likely than non-APIAs to have current health insurance coverage (83.8% vs. 80.3%). Among APIAs, Koreans were least likely to have insurance (63.5%), and South Asians, most likely (91.4%).

HMO Enrollment. Among insured adults, APIAs were more likely than non-APIAs to be enrolled in an HMO (60.6% vs. 54.6%). Among insured APIAs, Koreans were least likely to be enrolled in an HMO (48.9%), and Filipinos, most likely (69.5%).

Managed Care Plan Enrollment. Among insured adults, APIAs were more likely than non-APIAs to be enrolled in a managed care plan (67.7% vs. 62.1%). Among insured APIAs, Koreans were least likely to be enrolled in a managed care plan (49.1%), and Vietnamese, most likely (75.0%).

Medicare Enrollment. Among adults 65 years and older, APIAs were less likely than non-APIAs to be enrolled in Medicare (89.7% vs. 95.3%). Among APIAs 65 years of age and older, South Asians were least likely to be enrolled in Medicare (67.3%), and Koreans, most likely (94.7%).

Dental Care Affordability. APIAs were less likely than non-APIAs to be unable to afford dental care during the past year (15.7% vs. 21.2%). Among APIAs, Japanese were least likely be unable to afford dental care during the past year (6.0%), and Vietnamese, most likely (20.3%).

Dental Coverage. APIAs were more likely than non-APIAs to have dental coverage (64.6% vs. 59.5%). Among APIAs, Koreans were least likely to have dental coverage (39.6%), and Filipinos, most likely (74.4%).

Eye Exam Benefit. APIAs were as likely as non-APIAs to have an eye exam benefit in their insurance coverage (79.7% vs. 79.9%). Among APIAs, Koreans were least likely to have an eye exam benefit (73.3%), and Vietnamese, most likely (85.3%).

Mental Health Benefits. Among insured adults, APIAs were less likely than non-APIAs to have mental health benefits (76.4% vs. 83.4%). Among insured APIAs, Vietnamese were least likely to have mental health benefits (62.9%), and South Asians, most likely (85.9%).

Flu Shot. Among adults 65 years and older, APIAs were more likely than non-APIAs to have received a flu shot during the past year (74.6% vs. 70.1%). Among APIAs 65 years of age and older, South Asians were least likely to have received a flu shot (53.4%), and Koreans, most likely (81.0%).

Colorectal Screening. Among adults 40 years and older, APIAs were less likely than non-APIAs to have received colorectal screening during the past year (28.5% vs. 36.2%). Among APIAs 40 years of age and older, South Asians were least likely to have received colorectal screening (18.3%), and Japanese, most likely (33.6%).

Stool Test. Among adults 50 years of age and older, APIAs were less likely than non-APIAs to have received a stool test during the past 2 years (22.6% vs. 30.0%). Among APIAs 50 years of age and older, Koreans were least likely to have received a stool test (15.1%), and Japanese, most likely (29.0%).

Bone Density Test. Among females 50 years of age and older, APIAs were less likely than non-APIAs to have received a bone density test (29.2% vs. 34.5%). Among APIA females 50 years of age and older, Vietnamese were least likely to have received a bone density test (16.3%), and Japanese, most likely (43.9%).

PSA Test. Among males 50 years of age and older, APIAs were less likely than non-APIAs to have received a PSA test (68.7% vs. 77.2%). Among APIA males 50 years of age and older, Vietnamese were least likely to have received a PSA test (54.5%), and Japanese, most likely (79.3%).

Hysterectomy. Among females 40 years of age and older, APIAs were less likely than non-APIAs to have had a hysterectomy (15.0% vs. 26.6%). Among female APIAs 40 years of age and older, Koreans were least likely to have had a hysterectomy (11.2%), and Japanese, most likely (22.2%).

Pap test. APIA females were less likely than non-APIA females to have received a Pap test during the past 3 years (71.9% vs. 84.9%). Among APIA females, Koreans were least likely to have a recent Pap test (64.1%), and Filipinos, most likely (81.8%).

Mammogram. Among females 40 years of age and older, APIAs are less likely than non-APIAs to have received a mammogram during the past 2 years (70.1% vs. 74.9%). Among APIA females 40 years of age and older, Koreans were least likely to have received a recent mammogram (56.3%), and Vietnamese, most likely (74.7%).

Physician Communication Problem. APIAs were as likely as non-APIAs to have a communication problem with their physician (5.3% vs. 4.6%). Among APIAs, South Asians were least likely to have a communication problem with their physician (1.5%), and Vietnamese, most likely (11.5%).

Language Difference Causes Physician Communication Problem. Among adults with a communication problem with their physician, APIAs were as likely to attribute this to a language difference as non-APIAs (56.6% vs. 62.5%). Among APIAs with a physician communication problem, South Asians were least likely to cite a language difference for this problem (21.8%), and Japanese, most likely (80.1%).

Chronic Disease and Disability

Arthritis. APIAs were less likely than non-APIAs to have arthritis (11.9% vs. 20.8%). Among APIAs, Koreans were least likely to have arthritis (8.0%), and South Asians, most likely (15.1%).

Asthma. APIAs were less likely than non-APIAs to have asthma (9.1% vs. 12.2%). Among APIAs, Koreans were least likely to have asthma (4.9%), and Japanese, most likely (14.7%).

High Blood Pressure. APIAs were less likely than non-APIAs to have high blood pressure (21.6%. vs. 23.0%). Among APIAs, South Asians were least likely to have high blood pressure (17.1%), and Filipinos most likely (28.2%).

Heart Disease. APIAs were less likely than non-APIAs to have heart disease (5.3% vs. 7.2%). Among APIAs, South Koreans were least likely to have heart disease (4.4%), and Vietnamese, most likely (7.3%).

Diabetes. APIAs were as likely as non-APIAs to have diabetes (6.1% vs. 6.5%). Among APIAs, Chinese were least likely to have diabetes (3.9%), and Filipinos, most likely (8.6%).

Cancer. APIAs were less likely than non-APIAs to have cancer (2.9% vs. 8.9%). Among APIAs, South Asians were least likely to have cancer (0.3%), and Japanese most likely (4.6%).

Non-Skin Cancer. APIAs were less likely than non-APIAs to have a non-skin cancer (2.7% vs. 5.3%). Among APIAs, South Asians were least likely to have a non-skin cancer (0.2%), and Japanese, most likely (4.1%).

Skin Cancer. APIAs were less likely than non-APIAs to have skin cancer (0.2% vs. 3.7%). Among APIAs, Koreans were least likely to have skin cancer (0.0%), and Japanese, most likely (0.5%).

Needs Special Equipment for Disability. APIAs were less likely than non-APIAs to have a health limitation that required special equipment (3.4% vs. 6.5%). Among APIAs, Koreans were least likely to have a health limitation that required special equipment (2.1%), and Filipinos, most likely (4.3%).

Appendix 1

Detailed Methods

Survey Methodology

The data for this study were collected as part of the 2001 and 2003 biennial California Health Interview Survey (CHIS). Information from California residents was collected through a collaborative effort involving the Center for Health Policy Research (CHPR) at the University of California at Los Angeles, the California Department of Health Services, the Public Health Institute (Oakland, CA), and Westat, a research corporation based in Rockville, Maryland, that conducted the interviews.

In order to elicit health information from a representative group of Californians, a two-stage stratified sampling design was employed in conjunction with random digit dialing to recruit study participants from all regions in California. However, to ensure adequate numbers in some ethnic groups, surveyors contacted a supplemental sample selected on the basis of family surnames and telephone directory-listed numbers. In 2001, Japanese-, Korean-, Asian Indian-, Vietnamese-, and Cambodian Americans were oversampled, and in 2003, Korean-, and Vietnamese-Americans were oversampled. Preliminary analyses of the data did not reveal any substantial differences between respondents obtained from listed sample and those obtained from random digit dialing.

The resultant 2001 and 2003 samples of adult Californians provide information regarding socio-demographic characteristics, relevant medical history, health care coverage, use of health services, and health-related behaviors. The data were collected via computer-assisted telephone interviews (CATI). To facilitate communication with the ethnically diverse California population, the survey was administered in several languages, including Mandarin, Cantonese, Vietnamese, and Korean. The average time for completion of an interview was 32 minutes.

In the 2001 survey, 59.2% of all sampled households were screened for participation, and 63.7% of the adults sampled within these households completed the interview for an overall response rate of 37.7%. In 2003, 55.9% of all sampled households completed the screening interview, and 60.0% of the adults sampled within these households completed the interview for an overall response rate of 33.5%. The response rate for the APIA subsample is not known. Although sample weights were applied to the data to make the sample more representative of the California population, it is possible that the suboptimal response rate obtained in the CHIS may bias the results of this survey.

Overall, more than 98,000 adults participated in the CHIS 2001 and 2003, including almost 8,200 APIAs (see table). Detailed information about the survey methods and sampling design is available at http://www.chis.ucla.edu.

California Health Interview Survey, 2001 and 2003:
Adult Sample Sizes by Group and Overall

Group	2001	2003	Overall
Chinese	1,227	1,264	2,491
Filipino	831	689	1,520
Japanese	468	360	828
Korean	789	492	1,281
South Asian	381	400	781
Vietnamese	821	470	1,291
All APIA	4,517	3,675	8,192
Non-APIA	51,753	38,369	90,122
Overall	56,270	42,044	98,314

Data Analysis

The public use data included in these analyses represent the second release of the CHIS 2001 and CHIS 2003 datasets. The release dates for the 2001 and 2003 data were February 7, 2005 and September 29, 2005, respectively. The data were downloaded from the CHIS website (www.chis.ucla.edu). SAS (version 8.2) was used for data manipulation and variable recoding.

The frequencies were standardized using the direct standardization method. Frequencies were calculated as weighted averages of the stratum-specific frequencies of the standard population, which consisted of the population of all adults who participated in both statewide surveys. The strata were defined by age category (usually 18-34, 35-49, 50-64, and 65 or more years of age) or by sex (male, female) or by both variables. Due to the two-stage stratified survey design, SUDAAN (version 9.01) was used to calculate frequencies, standard errors and 95% confidence intervals.

Study Indicators

The results included in this report reflect analyses of study indicators collected through the CHIS. The CHIS project team employed three different imputation approaches to fill in missing data for measures that were used for statistical weighting and basic descriptive results. With a few exceptions noted below, the measures were assessed in both 2001 and 2003 and combined for this report. The measures are described briefly below.

Race/Ethnicity. Respondents were asked their race and indicated which group they most identified with, with the level of detail permitting identification of specific countries (e.g., Mexican, Salvadoran, Sri Lankan). The CHIS race/ethnicity variable incorporated this information into a final designation whose categories included Asian, Pacific Islander, Latino, American Indian/Alaska Native, African American, White, Other Single/ Multiple Race Asian Type, and Other Single/Multiple Type/Primary Race Not

Asian. The Asian subgroup status measure included Chinese, Filipino, Japanese, Korean, Vietnamese, South Asian, Cambodian, and Other Single/Multiple Race Asian Type. For this report, respondents who were coded as Asians, Pacific Islanders or Other Single/ Multiple Race Asian Types were considered to be APIAs. APIAs were contrasted with all other adults in California, and each of the six major APIA groups (Chinese, Filipino, Japanese, Korean, South Asian, Vietnamese) was contrasted with all APIAs.

Age. Based on self-reported age, adults were classified into four categories, 18 to 34 years of age, 35 to 50 years of age, 51 to 64 years of age, and 65 years or older. Children and adolescents interviewed as part of the CHIS were not included in this report.

Arthritis. This measure was based on respondents' report of whether a doctor ever told them they had arthritis. This measure was not collected in 2003.

Asthma. This measure was based on respondents' reports of whether a doctor ever told them they had asthma.

Average Number of Drinks. This measure calculates the respondent's consumption of alcoholic drinks over the previous 30 days, and represents the total number of drinks consumed during this time period. This measure was analyzed separately for males and females.

Binge Drinker. This measure indicated whether the respondent had drunk at least 5 alcoholic drinks in one day during the past month. This measure was analyzed separately for males and females.

Bone Density Test. This measure indicated whether a female 50 years of age and older had ever received a bone density test. This test is used in screening for osteoporosis.

Cancer. Three measures were constructed based on whether the respondent reported that a doctor ever told them they had cancer and the type of cancer diagnosed. Cancer corresponds to any cancer; Cancer (non-skin) corresponds to any cancer except skin cancer, and Cancer (skin) corresponds to skin cancer.

Colorectal Exam. This measure indicated whether a respondent 40 years of age and older had ever received a colorectal exam. This test is used in screening for cancer of the colon and rectum.

Could Not Afford Dental Care. This measure, available only in 2003, indicated whether the respondent could not afford dental care during the previous year.

Current Drinker. This measure indicated whether the respondent had taken at least one alcoholic drink in the past 30 days. This measure was analyzed separately for males and females.

Currently Insured. This measure indicated whether the respondent was currently covered by a private or public health insurance plan.

Current Smoker. This measure was based on whether the respondent has smoked at least 100 cigarettes in their lifetime and currently smoked some days or every day. This measure was analyzed separately for males and females.

Dental Health Insurance. This measure indicated whether the respondent currently had dental health benefits.

Delayed Care. This measure indicated whether the respondent reported that he or she delayed or did not receive needed care during the past 12 months.

Delayed Prescription. This measure indicated whether the respondent reported that he or she delayed or did not receive prescribed medication during the past 12 months.

Diabetes. This measure was based on respondents' reports of whether a doctor ever told them they had diabetes.

English Proficiency. This measure identified respondents who were not able to speak English well/ not at all. Individuals who spoke only English were classified as being able to speak English well.

English Spoken at Home. This measure indicated whether or not English was spoken in the home, regardless of whether or not another language is also used in the home.

Emergency Room Visits. Available in 2001 only, this measure indicated whether the respondent visited an Emergency Room in the past 12 months.

Eye Exam Benefits. This measure indicated whether the respondent currently had eye exam benefits. Only those with some form of health insurance were included in the calculation of this measure.

Felt Sad. This measure, available only in 2001, indicated whether the respondent felt sad or downhearted some, most, or all of the time during the past 4 weeks. Respondents who reported that they felt sad only a little of the time were grouped with those who did not feel sad at all.

Five Fruits and Vegetables. This measure, available only in 2001, indicates whether respondents consumed at least five servings of fruits and vegetables per day, on average. This dietary measure is used to assess the effectiveness of some cancer prevention programs.

Flu Shot. This measure indicated whether respondents 65 years of age and older had received a flu shot in the past year.

Food Security. This measure indicated whether the respondent had adequate access to food.

Health Care Rating. This measure, available only in 2003 for respondents who saw a doctor in the past year, assessed whether respondents rated their overall health care between 0 and 10 on a scale where 0 corresponded to "worst health care possible" and 10 corresponded to "best health care possible." Respondents who provided a rating less than 7 were considered to rate their care as "less than great."

Heart Disease. This measure was based on respondents' reports of whether a doctor ever told them they had heart disease.

High Blood Pressure. This measure was based on respondents' reports of whether a doctor ever told them they had high blood pressure.

HMO Enrollment. This measure, available only in 2003, identified whether a respondent was enrolled in a Health Maintenance Organization (HMO).

Hysterectomy. This measure indicated whether a female 40 years of age and older had a hysterectomy.

Language Difference Causes Physician Communication Problem. This measure, available only in 2003 for those who had a communication problem with their doctor during the past two years, indicated whether the problem was due to language.

Mammogram Screening. This measure indicated whether female respondents at least 40 years of age had received a mammogram in the past 2 years. This test is used in screening for breast cancer.

Managed Care Coverage. This measure, available only in 2003, identified whether a respondent was enrolled in a managed care plan.

Medicare Coverage. This measure was calculated for respondents aged 65 and older, and indicated whether they were currently enrolled in Medicare.

Mental Health Insurance. This measure, available only in 2001, indicated whether the respondent's health insurance included coverage for mental health care. Only those with health insurance were included in the calculation of this measure.

Needs Special Equipment. This measure indicated whether the respondent had a health limitation that required special equipment.

Needed Help for Mental/Emotional Problems. This measure, available only in 2001, indicated whether the respondent needed help for mental or emotional problems during the previous year.

Obese. This measure was based on an individual's self-reported weight (in kilograms) and height (in meters). A ratio of weight to height squared is reported in kg/m^2. Individuals with a body mass index (BMI) greater than 30 kg/m^2 was considered obese.

Overweight. This measure was based on an individual's self-reported weight (in kilograms) and height (in meters). A ratio of weight to height squared is reported in kg/m^2. Individuals with a body mass index (BMI) greater than 25 kg/m^2 was considered overweight.

Pap test. This measure indicated whether female respondents had received a Papanicolaou (Pap) test during the past 3 years. This test is used in screening for cervical cancer.

Physical Activity. This variable developed by CDC measures whether respondent reported moderate-intensity activities in a usual week (i.e., brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate) for greater than or equal to 30 minutes per day and greater than or equal to 5 days per week; **or** reported vigorous-intensity activities in a usual week (i.e., running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate) for greater than or equal to 20 minutes per day and greater than or equal to 3 days per week, **or** both.

Physician Communication Problem. This measure, available only in 2003 for those who visited a physician in the past 2 years, indicated whether the respondent had difficulty understanding his/her physician.

Physician Visit. This measure indicated whether a respondent visited a medical doctor at least once in the past 12 months.

PSA Test. This measure indicated whether a male 50 years of age and older had ever received a prostate-specific antigen (PSA) test. This test is used in screening for prostate cancer.

Self Rated Health. This measure was based on the respondent's report of his or her general health condition. Respondents were distinguished by whether they indicated that their health was good or excellent versus fair or poor.

Stool Test. This measure indicated whether a respondent 50 years of age and older had a blood stool test during the past 2 years.

Uninsured. This measure indicated whether the respondent had not been covered by health insurance at some time during the previous year.

Usual Source of Care. This measure indicted whether a respondent had a usual place to go when sick or in need of health advice.

Appendix 2

The Health of Asian Pacific Islander American Adults in California: 2001 and 2003
Graphical Presentation of Group Differences by Indicator

Appendix 2 is available at:
http://cfch.berkeley.edu/reports/reports.html/APIA health 2001-2003 Appendix 2.pdf