

Chronic Conditions of Californians

Findings from the 2003
California Health Interview Survey

Mona Jhavar, MPH
Steven P. Wallace, PhD

December 2005



CALIFORNIA
HEALTHCARE
FOUNDATION

Funded by a grant from
The California HealthCare Foundation



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Citation: M Jhavar, SP Wallace. *Chronic Conditions of Californians: Findings from the 2003 California Health Interview Survey*. Los Angeles, CA: UCLA Center for Health Policy Research, 2005.

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The California HealthCare Foundation (CHCF) funded the research and development of this report. The CHCF is an independent philanthropy committed to improving California's healthcare delivery and financing systems based in Oakland. Formed in 1996, the goal of CHCF is to ensure that all Californians have access to affordable, quality health care. For more information about the CHCF, visit www.chcf.org.



*california
health
interview
survey*

The California Health Interview Survey (CHIS) is a collaboration of the UCLA Center for Health Policy Research, the California Department of Health Services, and the Public Health Institute. Funding for CHIS comes from state and federal agencies and from several private foundations. For more information on CHIS, visit www.chis.ucla.edu

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Chronic diseases account for over 1.7 million deaths in the United States and three quarters of our nation's health care costs each year.¹ Chronic diseases, including cardiovascular disease (primarily heart disease and stroke), cancer and diabetes, are the leading causes of death in California and have become among the most common, costly and often preventable of all health problems.² Chronic diseases are prolonged or permanent health conditions present for at least three months, often requiring ongoing medical management.³ The widespread prevalence of chronic disease places a heavy burden on our health care system.

Health service utilization, including emergency room use, hospitalization and doctor visits shows the substantial impact of adults with chronic conditions on our health care system. Data available from the 2001 California Health Interview Survey (CHIS) show that 20.7% of adults with asthma visited the emergency room in the previous year compared to 13.6% of adults without asthma.⁴ Among adults with diabetes in 2001, 19.2% stayed in a hospital overnight in the prior year compared to 7.9% of adults without diabetes.⁵ In 2003, 38.9% of adults over 18 reporting fair or poor health status visited the doctor six or more times compared to 14.6% of adults in better health.⁶ Although individuals with chronic conditions often require medical treatment for problems associated with chronic conditions, regular medical monitoring and care can prevent complications that are costly to both the patient and California's health care system. Maintaining a well organized and

accessible health service system can therefore reduce the overall health care costs and the poor health outcomes associated with chronic conditions.

Chronic Conditions of Californians examines ambulatory sensitive conditions that respond well to medical treatment and management, including heart disease, hypertension, diabetes and asthma. Appropriate medical management of these conditions often prevents or postpones debilitating consequences. For example, without intervention, heart disease can progress to congestive heart failure. If uncontrolled, hypertension can lead to kidney failure, heart attacks and strokes. Diabetes can lead to kidney disease, blindness and lower limb amputation when left untreated. Self-reported fair or poor health status is also examined in this report, since it is a good predictor of future poor health outcomes—including mortality—and is highly correlated with chronic conditions.

This report provides information for counties and Los Angeles Service Planning Areas (SPAs) to assist health planners and policymakers identify areas with high rates of chronic conditions, and identify local health systems that may require strengthening in order to adequately meet local needs. The total burden on health systems from chronic disease is indicated by two indices that reflect whether an individual has one or more chronic conditions, one index each for adults and for children (Exhibit 1). Among adults, the chronic conditions index represents the percent of

1 The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease 2003. Centers for Disease Control and Prevention. U.S. DHHS. http://www.cdc.gov/nccdphp/power_prevention/pdf/power_of_prevention.pdf

2 Profiling the Leading Cause of Death in the United States—California. Centers for Disease Control and Prevention. U.S. DHHS. <http://www.cdc.gov/nccdphp/factsheets/ChronicDisease/california.htm>

3 National Center for Health Statistics Data Definitions. Centers for Disease Control and Prevention. U.S. DHHS. <http://www.cdc.gov/nchs/dataawh/nchsdefs/healthcondition.htm#chronic>

4 California Health Interview Survey, UCLA Center for Health Policy Research. CHIS 2001. <http://www.chis.ucla.edu>

5 Ibid

6 California Health Interview Survey, UCLA Center for Health Policy Research. CHIS 2003. <http://www.chis.ucla.edu>

adults with heart disease, hypertension, diabetes, fair or poor health status and/or asthma (Map 1). The chronic conditions index among children is the rate of children with asthma and/or fair or poor health status. Each index is divided into five groups or *quintiles* of similar numbers of counties and Los Angeles SPAs where the highest group number corresponds to the highest prevalence rates of chronic conditions. These indices highlight counties with a high burden of chronic conditions that face the greatest challenges in medical treatment and management.

As access to health care is critical for individuals with chronic conditions that require regular medical treatment and management, this report also presents access indicators describing difficulties that adults can face when seeking health care. One indicator characterizes actual problems experienced when seeking health care (Exhibit 1, Map 2). It reports the percent of one or more problems accessing health services defined as a delay in accessing services in the past year and/or having no usual source of care. A second indicator characterizes resource limitations that are potential barriers when seeking health care (Exhibit 1, Map 3). It reports the percent of one or more barriers to health care access defined as being uninsured anytime in the past year, being limited English proficient, and/or living at 0-199% of the Federal Poverty Level (FPL). Each indicator is divided into five groups or quintiles of counties and SPAs where a higher group number indicates higher rates of problems accessing health services or higher rates of barriers to health service access.

A composite measure is also presented for counties and Los Angeles SPAs that can be used to determine areas with the heaviest overall burden due to chronic conditions. The Composite of Chronic Conditions and Access Indicators is a seven indicator summary index comprised of the five chronic conditions among adults, the problems accessing health services and the barriers to health care access (Exhibit 2). The final two columns of the composite tally the number of conditions and indicators that fall into the best two and the worst two groups or quintiles. The higher the number of indicators in the best two groups suggests a healthier locale than most counties, and/or fewer problems accessing health services or barriers to health care access. The higher the number of indicators in the worst two groups indicates a higher burden of chronic disease than most counties, and more problems accessing health services and/or barriers to health care access.

Chronic Conditions of Californians also provides prevalence rates and data on selected characteristics of persons with chronic conditions. One characteristic is the racial and ethnic distribution within each chronic condition by region. This is different from presentations of race/ethnicity data that examine the chronic condition rates of particular groups to highlight health disparities between races. It is well documented that communities of color tend to have higher rates of chronic conditions. For example, hypertension is higher among African Americans compared to non-Latino whites.⁷ Latinos, African Americans, and American Indian/Alaska Natives (AIANs) have higher rates of diabetes than non-Latino

7 QuickStats Percentage of Persons Aged ≥ 20 Years with Hypertension by Race/Ethnicity—United States 1999-2003. Morbidity and Mortality Weekly Report. 2005 Aug 25; 54(33):826. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5433a4.htm>

whites.^{8,9,10,11} African Americans and American Indian/Alaska Natives have higher lifetime asthma prevalence rates than non-Latino whites.¹² Health planners and policymakers, however, require an understanding of the racial and ethnic makeup of their target population to appropriately tailor intervention efforts that are distinct and responsive to the demographics of their county. The racial and ethnic distributions presented in this report provide this required understanding of the characteristics of those with chronic conditions *within* each county and SPA, but does not provide information needed for *between* county comparisons by race and ethnicity.

This report further characterizes the population with chronic conditions by presenting the characteristics of adults with each chronic condition, including the percent of each condition who were low-income, had Medi-Cal, or were age 65 and over. The distribution of adults with each chronic condition who were low-income highlights counties where individuals with chronic conditions may have fewer resources available to effectively treat and manage their condition. The distribution of adults with a chronic condition who have Medi-Cal shows the importance of public health service funding for medical treatment and management of individuals with chronic conditions at the local level. The range of services available to that portion of chronic illness sufferers is determined by Medi-Cal policies and

practices. The distribution of adults 65 and over among each chronic condition population shows that chronic conditions and their consequences are not only issues for the elderly with Medicare. It suggests that there are substantial numbers of adults with chronic conditions who may be particularly sensitive to problems accessing health services. These distributions are presented to provide a deeper understanding of each chronic condition population for policymakers and public health officials as they target intervention efforts and plan service provision. Distributions of adults with each chronic condition who were limited English proficient and uninsured at any time were not included in this report due to space limitations but can be found online at: www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

This report is divided into four sections. The first section provides a narrative summary of key findings about chronic disease prevalence and the characteristics of the population with each condition. The second section presents maps that summarize the aggregated prevalence of chronic conditions among adults, problems accessing health care and barriers to health care access. The third section of the report presents narrative summaries, prevalence rates and descriptive data on the characteristics of selected chronic conditions among adults and children. Further details on methodology can be found in the final section of this report.

8 N Chawla, M Rodriguez, SH Babey, ER Brown. *Diabetes Management among Latinos in California: Disparities in Access and Management*, Los Angeles: UCLA Center for Health Policy Research, September 2003. <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=73>

9 A Yancey, M Gatchell, ER Brown, W McCarthy. *Diabetes is a Major Health Problem for African Americans*, Los Angeles: UCLA Center for Health Policy Research, November 2003. <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=80>

10 J Aguayo, ER Brown, M Rodriguez, L Margolis. *Important Health Care Issues for California Latinos: Health Insurance and Health Status*, Los Angeles: UCLA Center for Health Policy Research, January 2003. <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=60>

11 D Satter, NR Burrows, M Gatchell, M Tauli'i, DT Welch. *Diabetes Among American Indians and Alaska Natives in California: Prevention is Key*. Los Angeles: UCLA Center for Health Policy Research, 2003. <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=81>

12 YY Meng, SH Babey, E Malcolm, ER Brown, and N Chawla. *Asthma in California: Findings from the 2001 California Health Interview Survey*. Los Angeles: UCLA Center for Health Policy Research, 2003. <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=83>

Due to space limitations, the chronic conditions index among children's map, regional exhibits describing adults and children with a chronic condition who were uninsured anytime and limited English proficient, county demographic profiles and confidence intervals are available only online at: www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

SUMMARY OF FINDINGS

The following provides an overview of key findings on the prevalence of selected chronic conditions and the demographic characteristics of each population impacted by a chronic condition.

Chronic Conditions Indices and Access Indicators

- **Chronic conditions—adults:** In 2003, 11.5 million California adults age 18 and over (45.2%) were living with one or more chronic conditions, including heart disease, hypertension, diabetes, asthma or fair/poor health status. The areas with the highest rates of having any of these conditions were Los Angeles Service Planning Area (LA SPA) South, Madera County, Lake/Mendocino county group, Kern County, and Colusa/Glenn county group (Exhibit 1, Map 1).
- **Chronic conditions—children:** In 2003, 1.9 million children ages 1-17 (21.7%) were living with asthma and/or fair-poor health status. Counties with the highest rates were found clustered in the Central Valley: Merced County, San Joaquin County, Colusa/Glenn county group, Kings County and Tulare County (Exhibit 1).
- **Access problems—experienced:** Almost one third of adults in California (32.1%) experienced one or more problems accessing health services, either encountering delays accessing health services or

having no usual source of care. LA SPA Metro was the area with the highest rate of problems accessing health services followed by the more rural counties of Santa Cruz, Imperial, Kern and Butte (Exhibit 1, Map 2).

- **Access—potential barriers:** Almost half of adults (44.7%) had one or more potential barriers to health service access in 2003, such as being uninsured anytime in the past year, limited English proficient, or low-income. LA SPA South was the area with the highest rate of potential barriers to health service access, followed by Imperial County, LA SPA Metro and Tulare County (Exhibit 1, Map 3).
- **Highest impact areas:** The Composite of Chronic Conditions and Access Indicators is an index of the five chronic conditions of adults, the summary indicator of problems experienced accessing health services, and the summary indicator of potential barriers to health care access. Overall, the Colusa/Glenn county group, Kern County, Madera County and Merced County were the areas where six out of seven indicators were the worst in the state. Marin County and Santa Clara County had among the best rates in all seven indicators, followed by LA SPA West, San Diego County and San Mateo County, with among the best rates in six out of seven indicators (Exhibit 2).

Heart Disease

- The proportion of adults in California who reported being diagnosed with heart disease varied by county—from 4.5 to 12.7%. The counties with the highest rates of heart disease were primarily found in the Northern/Sierra region. Over one in ten adults in the county groups of Alpine/Amador, Sutter/Yuba, Del Norte/Humboldt, and Butte, Shasta and Kern counties had heart disease in 2003 (Exhibit 4).

- There were factors that complicated access to health services for many adults with heart disease. Over one-third of adults with heart disease (37.3%) were low-income (living below 200% FPL), approximately one-fifth of adults with heart disease had Medi-Cal, and only one-half were age 65 or older (Exhibit 4).

Hypertension

- In 2003, over six million adults reported being diagnosed with hypertension in California and it was most common in the Lake/Mendocino county group and Solano County (32.9% and 31%, respectively). However, over one-third of all California adults with hypertension were found in two counties that had the largest numbers of adults with hypertension: Los Angeles County (1,672,000) and San Diego County (497,000; Exhibit 6).
- Los Angeles County had the greatest proportion of adults with hypertension who were Latino (30.2%) and African American (13.7%). The Greater Bay Area had the greatest proportion of adults with hypertension who were Asian (17%). The Northern/Sierra region had the greatest proportion of adults with hypertension who were American Indian/Alaska Native (2.4%; Exhibit 5). Since these are distributions, not rates, they indicate priority populations in each region but do not provide information about the relative risk between regions.

Diabetes

- More than 1.6 million California adults reported being diagnosed with diabetes in 2003. The highest rates of diabetes were found in Imperial (10.9%), Madera (9.8%) and Merced (9.7%) Counties (Exhibit 8).

- Almost half of adults with diabetes (45.6% or over 765,000) were low-income and over one-third were adults over the age of 65 (37% or over 620,000; Exhibit 8).

Fair or Poor Health Status

- One in five California adults, or 5.2 million, reported having fair or poor health status in 2003. Of these adults three-fifths were low-income and nearly one-third had Medi-Cal (Exhibit 10).
- Approximately one out of three adults in LA SPA South and Imperial County had fair or poor health status in 2003—the highest rates in the state. Other areas with high rates include the Colusa/Glenn county group (28.2%), LA SPA Metro (27.8%), Kern (27.8%), Madera (27.7%), Merced (27.3%) and Kings (27.1%) counties (Exhibit 10).

Asthma Among Adults and Children

- In 2001-03 the highest rates of asthma among adults were found in Solano County (18.3%), the Del Norte/Humboldt county group (16.7%) and Napa County (16.6%; Exhibit 12).
- Among adults diagnosed with asthma, 56.4% were low-income in the Colusa/Glenn county group—the highest proportion in the state, followed by LA SPA South (54.6%) and Kings County (52.3%; Exhibit 12).
- In 2001-03, asthma among children was most commonly found in Solano County (21.2%), followed by Kings County (20.8%), Sacramento County (19.9%) and San Joaquin County (19.8%). Among children diagnosed with asthma, 71.9% were low-income in LA SPA South—the highest proportion in the state (Exhibit 14).

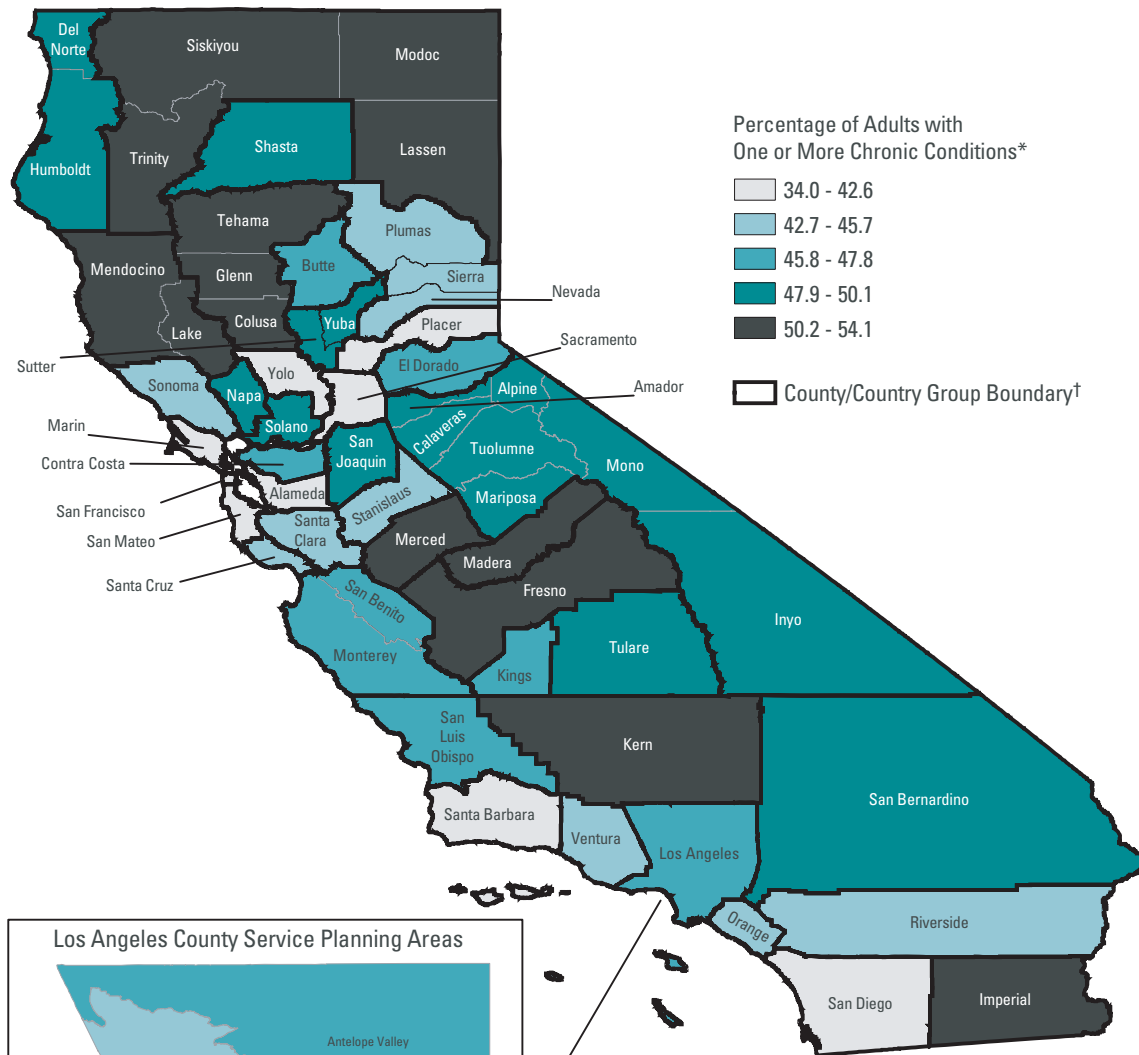
CONCLUSION: AREAS WITH THE HEAVIEST BURDEN OF CHRONIC CONDITIONS

The Composite of Chronic Conditions and Access Indicators can be used to determine areas in the state with the highest overall burden of chronic conditions (Exhibit 2). Overall, the Colusa/Glenn county group, Kern County, Madera County and Merced County were the areas with the most pressing needs, where six out of seven indicators for chronic condition rates, problems accessing health services or barriers to health care access were highest in 2003. Areas where five out of the seven indicators were highest included Butte County, Lake/Mendocino county group, LA SPA South, LA SPA South Bay, San Bernardino County, Shasta County and the Sutter/Yuba county group.

Maps and Exhibits of Chronic Conditions Indices and Access Indicators

section 2

MAP 1: PERCENTAGE OF ADULTS WITH ONE OR MORE CHRONIC CONDITIONS

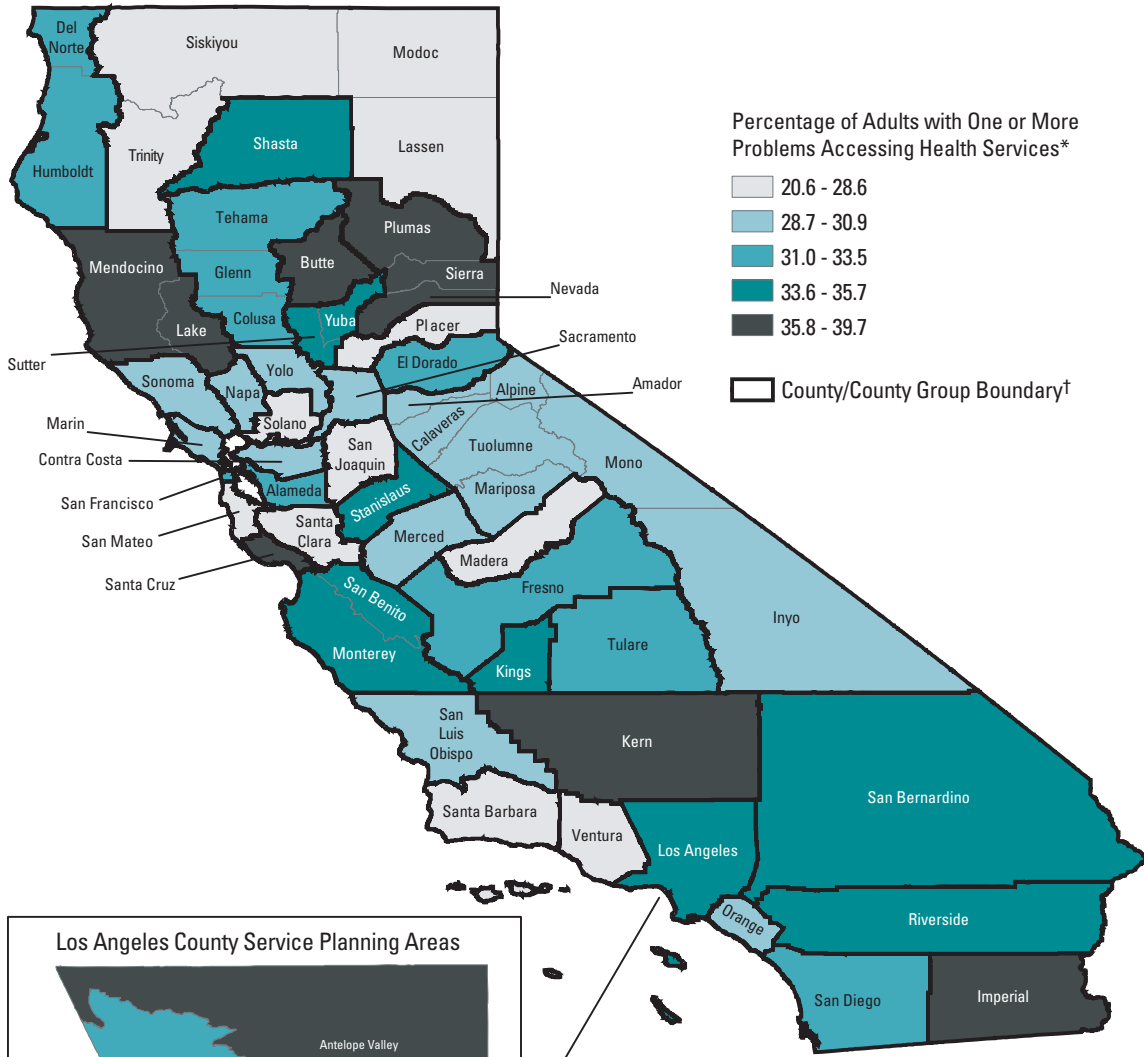


* Rates reflect the percentage of adults 18 and over who had one or more of the following chronic conditions in 2003: heart disease, hypertension, diabetes, asthma, or fair or poor health status.

† Counties with populations under 100,000 were grouped together into regions to produce reliable estimates.

Source: Estimates calculated by the UCLA Center for Health Policy Research, 2003 California Health Interview Survey.

MAP 2: PERCENTAGE OF ADULTS WITH ONE OR MORE PROBLEMS ACCESSING HEALTH SERVICES

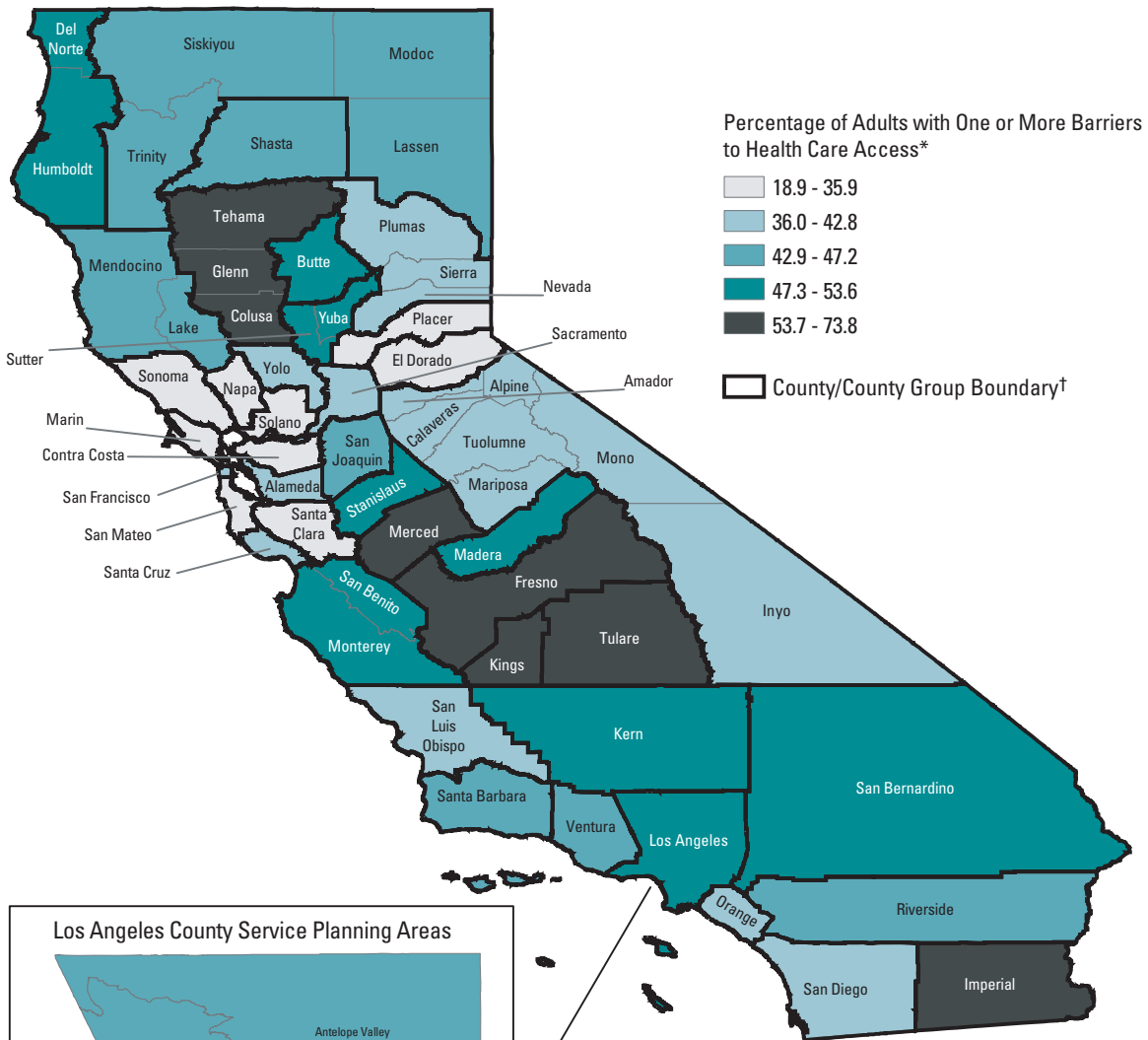


* Rates reflect the percentage of adults 18 and over who experienced one or more of the following in 2003: a delay accessing health services or no usual source of care.

† Counties with populations under 100,000 were grouped together into regions to produce reliable estimates.

Source: Estimates calculated by the UCLA Center for Health Policy Research, 2003 California Health Interview Survey.

MAP 3: PERCENTAGE OF ADULTS WITH ONE OR MORE BARRIERS TO HEALTH CARE ACCESS



* Rates reflect the percentage of adults 18 and over who had one or more of the following barriers to health care access in 2003: being uninsured anytime in 2003, limited English proficiency, or low income (below 200% of the Federal Poverty Level).

† Counties with populations under 100,000 were grouped together into regions to produce reliable estimates.

Source: Estimates calculated by the UCLA Center for Health Policy Research, 2003 California Health Interview Survey.

EXHIBIT 1. CHRONIC CONDITIONS INDICES AND ACCESS INDICATORS, 2003

COUNTY	PERCENTAGE OF ONE OR MORE CHRONIC CONDITIONS AMONG ADULTS AGE 18+ ^a	GROUP**	PERCENTAGE OF ONE OR MORE CHRONIC CONDITIONS AMONG CHILDREN AGE 1-17 ^b	GROUP**	PERCENTAGE OF ONE OR MORE PROBLEMS ACCESSING HEALTH SERVICES AMONG ADULTS AGE 18+ ^c	GROUP**	PERCENTAGE OF ONE OR MORE BARRIERS TO HEALTH CARE ACCESS AMONG ADULTS AGE 18+ ^d	GROUP**
CALIFORNIA	45.2	-	21.7	-	32.1	-	44.7	-
ALAMEDA	41.2	1	23.6	4	31.8	3	39.7	2
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	49.5	4	15.7*	1	28.8	1	42.3	2
BUTTE	47.7	3	25.4	5	38.1	5	50.5	4
COLUSA, GLENN, TEHAMA	53.4	5	30.2	5	31.1	3	53.8	5
CONTRA COSTA	46.5	3	24.0	4	29.6	2	28.3	1
DEL NORTE, HUMBOLDT	49.7	4	20.1	2	32.5	3	50.1	4
EL DORADO	46.2	3	20.8	3	32.0	3	31.5	1
FRESNO	52.4	5	25.1	4	32.9	3	54.8	5
IMPERIAL	50.4	5	24.0	4	38.8	5	68.7	5
KERN	53.4	5	23.5	3	38.1	5	53.3	4
KINGS	47.4	3	29.7	5	35.4	4	55.0	5
LAKE, MENDOCINO	53.8	5	12.2*	1	36.4	5	45.5	3
LASSEN, MODOC, SISKIYOU, TRINITY	52.0	5	16.9	1	27.4	1	45.1	3
LOS ANGELES	46.6	3	21.3	3	33.7	4	50.7	4
LA SPA ANTELOPE VALLEY	46.1	3	22.2	3	38.0	5	43.1	3
LA SPA EAST	45.7	2	20.6	2	31.1	3	54.7	5
LA SPA METRO	45.8	3	20.9	3	39.7	5	63.5	5
LA SPA SAN FERNANDO	45.1	2	17.9	1	31.3	3	43.9	3
LA SPA SAN GABRIEL	46.3	3	24.7	4	31.0	2	51.6	4
LA SPA SOUTH	54.1	5	24.7	4	37.7	5	73.8	5
LA SPA SOUTH BAY	49.4	4	20.5	2	33.7	4	46.3	3
LA SPA WEST	40.9	1	22.8	3	35.3	4	31.4	1
MADERA	53.9	5	19.2	2	27.7	1	52.1	4
MARIN	34.0	1	10.3*	1	29.1	2	18.9	1
MERCED	50.9	5	31.3	5	30.9	2	58.1	5
MONTEREY, SAN BENITO	47.5	3	25.9	5	35.7	4	51.7	4
NAPA	49.5	4	24.9	4	29.0	2	35.0	1

EXHIBIT 1. CHRONIC CONDITIONS INDICES AND ACCESS INDICATORS, 2003 (CONTINUED)

COUNTY	PERCENTAGE OF ONE OR MORE CHRONIC CONDITIONS AMONG ADULTS AGE 18+ ^a	GROUP**	PERCENTAGE OF ONE OR MORE CHRONIC CONDITIONS AMONG CHILDREN AGE 1-17 ^b	GROUP**	PERCENTAGE OF ONE OR MORE PROBLEMS ACCESSING HEALTH SERVICES AMONG ADULTS AGE 18+ ^c	GROUP**	PERCENTAGE OF ONE OR MORE BARRIERS TO HEALTH CARE ACCESS AMONG ADULTS AGE 18+ ^d	GROUP**
CALIFORNIA	45.2	-	21.7	-	32.1	-	44.7	-
NEVADA, PLUMAS, SIERRA	44.1	2	25.4	5	36.8	5	39.2	2
ORANGE	43.3	2	22.2	3	30.9	2	41.5	2
PLACER	41.5	1	17.7	1	27.1	1	23.5	1
RIVERSIDE	44.1	2	17.0	1	34.3	4	47.2	3
SACRAMENTO	42.6	1	23.5	4	30.8	2	40.6	2
SAN BERNARDINO	48.9	4	23.6	4	35.6	4	53.6	4
SAN DIEGO	41.0	1	18.3	1	31.6	3	39.6	2
SAN FRANCISCO	39.0	1	20.6	3	32.2	3	39.3	2
SAN JOAQUIN	49.3	4	31.2	5	28.1	1	45.3	3
SAN LUIS OBISPO	47.8	3	18.4	2	30.2	2	36.9	2
SAN MATEO	41.9	1	15.1	1	26.4	1	31.0	1
SANTA BARBARA	41.3	1	21.3	3	28.2	1	45.2	3
SANTA CLARA	42.7	2	22.7	3	27.9	1	35.9	1
SANTA CRUZ	45.3	2	18.3	2	39.3	5	42.8	2
SHASTA	50.1	4	20.4	2	34.2	4	45.5	3
SOLANO	49.4	4	24.0	4	20.6	1	31.2	1
SONOMA	43.3	2	25.5	5	28.9	2	32.7	1
STANISLAUS	45.0	2	18.8	2	34.6	4	50.6	4
SUTTER, YUBA	48.6	4	19.9	2	33.8	4	48.7	4
TULARE	49.9	4	29.2	5	33.5	3	60.8	5
VENTURA	43.1	2	19.0	2	28.6	1	43.5	3
YOLO	42.3	1	16.6	1	29.5	2	37.9	2

*Unstable estimate.

**Note: The rates from counties and SPAs were ranked from lowest to highest and then divided into five groups or quintiles. Group 1 reflects counties or SPAs with the least amount of a chronic condition (best rates). Group 5 reflects counties or SPAs with the highest amount of a chronic condition (worst rates).

a: Rates reflect the percent of adults age 18 and over who had one or more of the following chronic conditions: heart disease, hypertension, asthma, diabetes and fair/poor health status.

b: Rates reflect the percent of children ages 1-17 who had one or more of the following chronic conditions: asthma and fair/poor health status.

c: Rates reflect the percent of adults age 18 and over who experienced a delay accessing health services or had no usual source of care.

d: Rates reflect the percent of adults age 18 and over who were uninsured anytime in the past year, limited English proficient (LEP), and/or 0-199% FPL.

Confidence intervals and other supplemental materials are available at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

Source: 2003 California Health Interview Survey

EXHIBIT 2. COMPOSITE OF CHRONIC CONDITIONS AND ACCESS INDICATORS, ADULTS AGE 18 AND OVER, 2003

COUNTY	GROUP OR QUINTILE							TOTAL NUMBER OF INDICATORS IN BEST TWO GROUPS	TOTAL NUMBER OF INDICATORS IN WORST TWO GROUPS
	HEART DISEASE	HYPERTENSION	ASTHMA AMONG ADULTS	DIABETES	FAIR OR POOR HEALTH STATUS	PERCENT OF ONE OR MORE PROBLEMS ACCESSING HEALTH SERVICES	PERCENT OF ONE OR MORE BARRIERS TO HEALTH CARE ACCESS		
CALIFORNIA	–	–	–	–	–	–	–	–	–
ALAMEDA	1	1	3	1	2	3	2	5	0
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	5	5	2	4	4	1	2	3	4
BUTTE	5	4	5	1	2	5	4	2	5
COLUSA, GLENN, TEHAMA	5	5	5	4	5	3	5	0	6
CONTRA COSTA	3	4	4	2	2	2	1	4	2
DEL NORTE, HUMBOLDT	5	3	5	2	2	3	4	2	3
EL DORADO	3	4	4	1	1	3	1	3	2
FRESNO	3	3	5	4	5	3	5	0	4
IMPERIAL	3	3	2	5	5	5	5	1	4
KERN	5	5	3	4	5	5	4	0	6
KINGS	2	1	2	4	5	4	5	3	4
LAKE, MENDOCINO	4	5	4	3	4	5	3	0	5
LASSEN, MODOC, SISKIYOU, TRINITY	5	5	4	3	3	1	3	1	3
LOS ANGELES	3	3	1	4	4	4	4	1	4
LA SPA ANTELOPE VALLEY	4	3	4	1	3	5	3	1	3
LA SPA EAST	4	2	1	5	4	3	5	2	4
LA SPA METRO	2	1	1	3	5	5	5	3	3
LA SPA SAN FERNANDO	2	2	2	4	3	3	3	3	1
LA SPA SAN GABRIEL	2	3	1	3	4	2	4	3	2
LA SPA SOUTH	1	5	1	5	4	5	5	2	5
LA SPA SOUTH BAY	4	4	2	4	4	4	3	1	5
LA SPA WEST	1	2	2	1	1	4	1	6	1
MADERA	4	5	4	5	5	1	4	1	6
MARIN	2	2	2	1	1	2	1	7	0
MERCED	4	4	4	5	5	2	5	1	6
MONTEREY, SAN BENITO	4	1	2	3	4	4	4	2	4
NAPA	5	2	5	1	2	2	1	5	2

EXHIBIT 2. COMPOSITE OF CHRONIC CONDITIONS AND ACCESS INDICATORS, ADULTS AGE 18 AND OVER, 2003 (CONTINUED)

COUNTY	GROUP OR QUINTILE							TOTAL NUMBER OF INDICATORS IN BEST TWO GROUPS	TOTAL NUMBER OF INDICATORS IN WORST TWO GROUPS
	HEART DISEASE	HYPERTENSION	ASTHMA AMONG ADULTS	DIABETES	FAIR OR POOR HEALTH STATUS	PERCENT OF ONE OR MORE PROBLEMS ACCESSING HEALTH SERVICES	PERCENT OF ONE OR MORE BARRIERS TO HEALTH CARE ACCESS		
CALIFORNIA	–	–	–	–	–	–	–	–	–
NEVADA, PLUMAS, SIERRA	4	4	5	1	1	5	2	3	4
ORANGE	1	1	1	3	3	2	2	5	0
PLACER	4	1	5	2	1	1	1	5	2
RIVERSIDE	3	3	1	3	3	4	3	1	1
SACRAMENTO	2	2	4	4	1	2	2	5	2
SAN BERNARDINO	3	4	3	5	4	4	4	0	5
SAN DIEGO	2	2	1	2	1	3	2	6	0
SAN FRANCISCO	2	2	1	3	2	3	2	5	0
SAN JOAQUIN	1	5	3	4	3	1	3	2	2
SAN LUIS OBISPO	3	4	4	1	1	2	2	4	2
SAN MATEO	1	3	1	2	2	1	1	6	0
SANTA BARBARA	1	1	2	2	3	1	3	5	0
SANTA CLARA	1	2	2	2	2	1	1	7	0
SANTA CRUZ	3	1	4	1	2	5	2	4	2
SHASTA	5	4	5	5	3	4	3	0	5
SOLANO	3	5	5	3	3	1	1	2	2
SONOMA	4	3	3	2	1	2	1	4	1
STANISLAUS	1	1	3	2	3	4	4	3	2
SUTTER, YUBA	5	3	3	5	4	4	4	0	5
TULARE	2	4	3	5	5	3	5	1	4
VENTURA	1	2	3	2	2	1	3	5	0
YOLO	2	1	3	3	1	2	2	5	0

Note: The county and SPA rates for each indicator were first ranked from lowest to highest then divided into five groups or quintiles. Chronic condition rates can be found in Section Three. Rates for access indicators can be found in Exhibit 1: Chronic Condition Indices and Access Indicators, 2003.

Group 1 reflects counties or SPAs with the least amount of a chronic condition. Counties or SPAs within the first group were the healthiest one fifth of the state.

Group 2 reflects counties or SPAs with the second least amount of a chronic condition. Counties or SPAs within the second group were the healthiest second fifth of the state.

Group 3 reflects counties or SPAs with the third least amount of a chronic condition. Counties or SPAs within the third group were the healthiest middle fifth of the state.

Group 4 reflects counties or SPAs with the second highest amount of a chronic condition. Counties or SPAs within the fourth group are the second least healthy fifth of the state.

Group 5 reflects counties or SPAs with the highest amount of a chronic condition. Counties or SPAs within the fifth group were the least healthy fifth of the state.

Confidence intervals and other supplemental materials are available at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

Source: 2003 California Health Interview Survey

Chronic Conditions Prevalence and Characteristics *section 3*

HEART DISEASE SUMMARY

Statewide Characteristics

- In 2003, 6.9% or more than 1.7 million California adults age 18 and over reported being diagnosed with heart disease (Exhibit 4).
- Among all California adults with heart disease, over one-third had low-incomes (below 200% of the Federal Poverty Level) and roughly one-fifth had Medi-Cal (Exhibit 4).
- Approximately half of the adults with heart disease in California were age 65 and over (Exhibit 4). Half of the California adults with heart disease were then under 65 and reliant primarily on health insurance other than Medicare if they were insured.

Racial and Ethnic Characteristics

- Among California adults with heart disease, the racial/ethnic distribution was 18.4% Latino, 1.1% American Indian/Alaska Native, 8.4% Asian, 6.7% African American, 63.2% white, and 2.3% other (Exhibit 3). Since this is the racial/ethnic

composition of the population with heart disease, it cannot be used to make between group comparisons.

- Over one-quarter of adults with heart disease in Los Angeles County and the San Joaquin Valley were Latino (Exhibit 3).
- The Greater Bay Area had the highest proportion of adults with heart disease who were Asian and African American (Exhibit 3).

County Specific Characteristics

- In 2003 the highest prevalence of heart disease was found in Alpine County (12.7%) while San Joaquin County had the lowest rate (4.5%; Exhibit 4).
- Almost two-thirds of adults with heart disease in Imperial County and LA SPA South were low-income (Exhibit 4).
- Among adults with heart disease, over one-fifth (22%) had Medi-Cal. The areas of Fresno County, Imperial County, and LA SPA South had over twice the statewide proportion of adults with heart disease on Medi-Cal (Exhibit 4).

EXHIBIT 3. RACIAL AND ETHNIC CHARACTERISTICS OF ADULTS AGE 18 AND OVER WITH HEART DISEASE BY REGION, CALIFORNIA, 2001 AND 2003 COMBINED

LOCATION	ADULTS AGE 18 AND OVER WITH HEART DISEASE (HD)						TOTAL PERCENT
	PERCENT OF ADULTS W/HD WHO WERE LATINO	PERCENT OF ADULTS W/HD WHO WERE AIAN	PERCENT OF ADULTS W/HD WHO WERE ASIAN	PERCENT OF ADULTS W/HD WHO WERE AFRICAN AMERICAN	PERCENT OF ADULTS W/HD WHO WERE WHITE	PERCENT OF ADULTS W/HD WHO WERE OTHER	
CALIFORNIA	18.4	1.1	8.4	6.7	63.2	2.3	100
NORTHERN/SIERRA	4.4	2.5	1.3*	0.7*	87.8	3.2	100
GREATER BAY AREA	9.8	0.6*	13.5	10.9	63.4	1.9	100
SACRAMENTO	6.6	1.8*	8.0*	8.1	71.7	3.8	100
SAN JOAQUIN VALLEY	26.4	1.3	2.9*	5.9	60.6	2.8	100
CENTRAL COAST	19.2	1.7*	4.6*	1.9*	69.5	3.1	100
LOS ANGELES COUNTY	26.2	0.7*	11.3	8.9	51.5	1.5	100
OTHER SOUTHERN CALIFORNIA COUNTIES	18.9	1.2	6.1	3.7	67.4	2.6	100

*Unstable estimate

Source: 2001 and 2003 California Health Interview Surveys

Confidence intervals and other supplemental materials are available at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

**EXHIBIT 4. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH HEART DISEASE
BY COUNTY, CALIFORNIA 2003**

LOCATION	TOTAL PERCENT OF ADULTS WITH HEART DISEASE	TOTAL NUMBER OF ADULTS WITH HEART DISEASE	ADULTS AGE 18 AND OVER WITH HEART DISEASE		
			PERCENT OF ADULTS WITH HEART DISEASE WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH HEART DISEASE WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH HEART DISEASE WHO WERE AGE 65 AND OVER
CALIFORNIA	6.9	1,763,000	37.3	22.0	52.0
ALAMEDA	5.4	60,000	36.6	23.8	51.6
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	12.7	18,000	36.5	26.7	63.8
BUTTE	11.6	18,000	44.6	27.5	55.7
COLUSA, GLENN, TEHAMA	10.9	8,000	27.8	19.5	53.8
CONTRA COSTA	7.6	56,000	25.9	25.7*	49.7
DEL NORTE, HUMBOLDT	11.7	13,000	50.3	31.5	53.9
EL DORADO	6.9	9,000	25.3*	10.0*	52.2
FRESNO	7.4	43,000	54.6	47.5	55.1
IMPERIAL	6.8	7,000	65.6	44.2	49.1
KERN	11.2	53,000	34.1	32.3	48.4
KINGS	6.7	6,000	52.0	31.7	51.0
LAKE, MENDOCINO	8.9	10,000	41.4	29.6	56.1
LASSEN, MODOC, SISKIYOU, TRINITY	10.8	8,000	51.6	27.4	58.1
LOS ANGELES	6.9	493,000	42.1	24.4	48.5
LA SPA ANTELOPE VALLEY	8.3	17,000	42.8	34.4	52.4
LA SPA EAST	8.4	75,000	49.6	24.8	43.3
LA SPA METRO	6.2	55,000	54.7	35.3	41.3
LA SPA SAN FERNANDO	6.6	99,000	34.3	16.7	57.7
LA SPA SAN GABRIEL	6.5	83,000	41.0	27.9	54.9
LA SPA SOUTH	5.9	33,000	65.3	53.6	45.3
LA SPA SOUTH BAY	8.2	100,000	37.7	14.9	41.1
LA SPA WEST	5.5	32,000	20.3*	13.5*	52.8
MADERA	8.2	7,000	37.1	14.2*	59.7
MARIN	6.3	12,000	7.1*	5.6*	52.4
MERCED	8.7	13,000	49.5	35.5	48.4
MONTEREY, SAN BENITO	8.3	27,000	48.7	26.1*	65.5
NAPA	9.5	9,000	16.7*	-	58.9
NEVADA, PLUMAS, SIERRA	9.0	9,000	33.7	22.2*	58.8

**EXHIBIT 4. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH HEART DISEASE
BY COUNTY, CALIFORNIA 2003 (CONTINUED)**

LOCATION	TOTAL PERCENT OF ADULTS WITH HEART DISEASE	TOTAL NUMBER OF ADULTS WITH HEART DISEASE	ADULTS AGE 18 AND OVER WITH HEART DISEASE		
			PERCENT OF ADULTS WITH HEART DISEASE WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH HEART DISEASE WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH HEART DISEASE WHO WERE AGE 65 AND OVER
CALIFORNIA	6.9	1,763,000	37.3	22.0	52.0
ORANGE	5.9	128,000	32.0	11.5	50.4
PLACER	7.7	16,000	20.4*	20.9*	60.3
RIVERSIDE	6.9	83,000	34.6	21.4	63.4
SACRAMENTO	6.4	61,000	22.0	17.1*	55.9
SAN BERNARDINO	7.2	91,000	54.9	27.6	45.6
SAN DIEGO	6.6	143,000	34.5	17.3	47.2
SAN FRANCISCO	6.4	42,000	27.5	21.4	58.1
SAN JOAQUIN	4.5	19,000	25.0*	10.6*	38.5
SAN LUIS OBISPO	6.9	13,000	28.4	10.2*	74.6
SAN MATEO	6.0	32,000	28.4*	9.9*	65.9
SANTA BARBARA	5.4	16,000	37.8	22.7*	50.8
SANTA CLARA	5.8	73,000	29.6	17.5	56.3
SANTA CRUZ	7.6	15,000	42.9	17.2*	46.9
SHASTA	11.4	15,000	37.1	24.0	65.2
SOLANO	7.1	20,000	44.6	24.6*	48.2
SONOMA	8.5	30,000	30.0	9.1*	58.2
STANISLAUS	5.6	19,000	44.8	26.8*	49.6
SUTTER, YUBA	11.9	12,000	33.2	24.8	41.4
TULARE	6.6	17,000	45.4	13.4*	51.6
VENTURA	5.6	32,000	25.6	17.0*	51.2
YOLO	6.4	8,000	31.6*	17.5*	60.4

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Source: 2003 California Health Interview Survey

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

HYPERTENSION SUMMARY

Statewide Characteristics

- In 2003, over six million of California adults age 18 and over (23.5%) reported being diagnosed with hypertension (Exhibit 6).
- More than one-third of the over six million adults with hypertension in California were low-income (below 200% of the Federal Poverty Level) and almost one-fifth of adults with hypertension had Medi-Cal (Exhibit 6).
- Only one-third of adults with hypertension were age 65 and over while the approximately remaining two-thirds of adults with hypertension were under the age of 65 (Exhibit 6). While the risk of hypertension increases with age, hypertension is a significant issue for many non-elderly adults.

Racial and Ethnic Characteristics

- Among California adults with hypertension, the racial/ethnic distribution was 22.9% Latino, 0.8% American Indian/Alaska Native, 10.4% Asian, 8.8% African American, 54.9% white, and 2.1% other (Exhibit 5). Since this is the racial/ethnic composition of the population with hypertension, it cannot be used to make between group comparisons.

- Los Angeles County had the highest proportion of adults with hypertension who were Latino and African American. Among adults with hypertension in LA County, one-third were Latino and 13.7% were African American. The greatest proportions of Asian adults with hypertension were found in the Greater Bay Area (Exhibit 5). These rates provide information on the characteristics of those with hypertension in each region and not on the risk of hypertension for different racial/ethnic groups.

County Specific Characteristics

- One-third of adults in Lake/Mendocino county group had hypertension in 2003—the highest prevalence in the state. Adults in Santa Cruz had the lowest prevalence of hypertension in California (19.3%; Exhibit 6).
- The majority of adults with hypertension were low-income in three areas of the state: 59.2% in Imperial County and nearly two-thirds in LA SPA Metro and LA SPA South (Exhibit 6).
- Among adults with hypertension in Imperial County and LA SPA South, over one-third had Medi-Cal (Exhibit 6).

**EXHIBIT 5. RACIAL AND ETHNIC CHARACTERISTICS OF ADULTS AGE 18 AND OVER
WITH HYPERTENSION BY REGION, CALIFORNIA 2001 AND 2003 COMBINED**

LOCATION	ADULTS AGE 18 AND OVER WITH HYPERTENSION						TOTAL PERCENT
	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE LATINO	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE AIAN	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE ASIAN	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE AFRICAN AMERICAN	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE WHITE	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE OTHER	
CALIFORNIA	22.9	0.8	10.4	8.8	54.9	2.1	100
NORTHERN/SIERRA	6.8	2.4	1.7	1.3	84.7	3.0	100
GREATER BAY AREA	14.7	0.6	17.0	10.6	54.9	2.1	100
SACRAMENTO	11.8	0.8*	9.6	8.5	66.1	3.1	100
SAN JOAQUIN VALLEY	28.3	1.7	5.8	5.9	56.0	2.3	100
CENTRAL COAST	24.7	1.1	5.0	3.4	63.9	1.8	100
LOS ANGELES COUNTY	30.2	0.4	12.2	13.7	41.8	1.7	100
OTHER SOUTHERN CALIFORNIA COUNTIES	24.3	0.7	8.3	6.1	58.5	2.0	100

*Unstable estimate

Source: 2001 and 2003 California Health Interview Surveys

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

**EXHIBIT 6. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH HYPERTENSION
BY COUNTY, CALIFORNIA 2003**

LOCATION	TOTAL PERCENT OF ADULTS WITH HYPERTENSION	TOTAL NUMBER OF ADULTS WITH HYPERTENSION	ADULTS AGE 18 AND OVER WITH HYPERTENSION		
			PERCENT OF ADULTS WITH HYPERTENSION WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH HYPERTENSION WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE AGE 65 AND OVER
CALIFORNIA	23.5	6,012,000	34.9	18.7	35.9
ALAMEDA	21.1	234,000	29.0	17.6	37.2
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	29.9	42,000	27.6	18.9	47.3
BUTTE	26.6	42,000	40.7	25.2	38.8
COLUSA, GLENN, TEHAMA	28.1	21,000	37.3	16.7	38.7
CONTRA COSTA	26.5	194,000	22.3	18.4	33.5
DEL NORTE, HUMBOLDT	25.0	28,000	38.0	23.8	36.2
EL DORADO	25.7	32,000	25.8	7.2*	35.0
FRESNO	25.1	145,000	40.4	23.8	28.3
IMPERIAL	24.3	25,000	59.2	40.1	32.7
KERN	27.5	131,000	37.7	30.1	29.8
KINGS	21.6	18,000	48.3	18.5	30.8
LAKE, MENDOCINO	32.9	37,000	42.4	28.8	41.9
LASSEN, MODOC, SISKIYOU, TRINITY	30.0	21,000	38.8	19.5	39.6
LOS ANGELES	23.5	1,672,000	40.5	20.5	35.9
LA SPA ANTELOPE VALLEY	23.1	47,000	29.1	19.9	28.9
LA SPA EAST	22.6	203,000	44.6	18.0	32.0
LA SPA METRO	19.7	172,000	63.6	33.0	38.5
LA SPA SAN FERNANDO	23.0	343,000	28.8	16.5	40.9
LA SPA SAN GABRIEL	25.0	320,000	40.7	19.6	36.9
LA SPA SOUTH	27.1	150,000	63.4	38.2	24.6
LA SPA SOUTH BAY	25.2	307,000	37.1	17.8	36.4
LA SPA WEST	22.2	130,000	19.6	6.4*	37.4
MADERA	26.9	24,000	33.2	15.6	36.4
MARIN	21.6	41,000	19.8	11.6	44.9
MERCED	26.1	40,000	50.5	21.2	29.3
MONTEREY, SAN BENITO	21.4	70,000	30.3	16.7	40.7
NAPA	22.7	21,000	18.0	12.3	44.8
NEVADA, PLUMAS, SIERRA	25.7	24,000	32.3	9.7	44.4

EXHIBIT 6. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH HYPERTENSION BY COUNTY, CALIFORNIA 2003 (CONTINUED)

LOCATION	TOTAL PERCENT OF ADULTS WITH HYPERTENSION	TOTAL NUMBER OF ADULTS WITH HYPERTENSION	ADULTS AGE 18 AND OVER WITH HYPERTENSION		
			PERCENT OF ADULTS WITH HYPERTENSION WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH HYPERTENSION WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH HYPERTENSION WHO WERE AGE 65 AND OVER
CALIFORNIA	23.5	6,012,000	34.9	18.7	35.9
ORANGE	20.6	445,000	32.7	14.4	36.8
PLACER	20.8	44,000	16.3	7.0*	43.1
RIVERSIDE	24.6	298,000	37.2	14.4	41.6
SACRAMENTO	21.9	209,000	31.9	24.3	39.7
SAN BERNARDINO	25.9	325,000	43.4	26.7	29.7
SAN DIEGO	22.9	497,000	29.2	13.5	35.1
SAN FRANCISCO	22.1	144,000	34.2	22.5	39.9
SAN JOAQUIN	29.1	122,000	33.1	15.8	28.5
SAN LUIS OBISPO	26.0	49,000	24.5	10.4	42.4
SAN MATEO	23.3	125,000	25.4	14.6	39.5
SANTA BARBARA	20.2	59,000	25.0	14.0	41.2
SANTA CLARA	21.6	271,000	27.6	12.8	34.9
SANTA CRUZ	19.3	37,000	27.3	12.1*	35.0
SHASTA	25.9	34,000	39.1	21.9	42.4
SOLANO	31.0	89,000	35.3	17.8	31.6
SONOMA	23.9	84,000	25.7	17.2	37.9
STANISLAUS	21.4	72,000	34.4	19.7	34.5
SUTTER, YUBA	23.6	24,000	39.8	22.4	30.5
TULARE	25.9	67,000	46.9	27.1	31.7
VENTURA	22.5	128,000	32.3	17.5	31.6
YOLO	19.7	26,000	25.9	5.5*	33.4

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Source: 2003 California Health Interview Survey

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

DIABETES SUMMARY

Statewide Characteristics

- In 2003, more than 1.6 million California adults age 18 and over (6.6%) reported being diagnosed with diabetes (Exhibit 8).
- Almost half of the over 1.6 million California adults with diabetes were low-income (below 200% of the Federal Poverty Level) and over one-quarter of adults with diabetes had Medi-Cal (Exhibit 8).
- More than one in three adults with diabetes were over the age of 65 (Exhibit 8). While the risk of diabetes increases with age, nearly two-thirds of adults with diabetes were under the age of 65.

Racial and Ethnic Characteristics

- Among California adults with diabetes, the racial/ethnic distribution was 34.2% Latino, 1% American Indian/Alaska Native, 10.5% Asian, 9.4% African American, 42.8% white, and 2.2% other (Exhibit 7). Since this is the racial/ethnic composition of the population with diabetes, it cannot be used to make between group comparisons.
- In Los Angeles County the highest proportion of adults with diabetes were Latino (45.6%) followed by white (30.1%; Exhibit 7).
- The Greater Bay Area had the greatest proportion of Asian and African American adults with diabetes (Exhibit 7).

County Specific Characteristics

- In 2003 the highest rate of adults over 18 with diabetes was found in Imperial County (10.9%) followed by Madera County, Merced County, LA SPA South and Shasta County (Exhibit 8).
- In several areas in the state the majority of adults with diabetes were low-income. Three out of four adults with diabetes in Kings County and 70% of adults with diabetes in Fresno County and LA SPA Metro were low-income. Two-thirds of adults with diabetes in Imperial County, LA SPA South and Tulare County were also low-income (Exhibit 8).
- Almost half of adults with diabetes in Fresno and Imperial Counties had Medi-Cal.
- Among adults with diabetes in Marin, 82.2% were age 65 or over (Exhibit 8).

EXHIBIT 7. RACIAL AND ETHNIC CHARACTERISTICS OF ADULTS AGE 18 AND OVER WITH DIABETES BY REGION, CALIFORNIA 2001 AND 2003 COMBINED

LOCATION	ADULTS AGE 18 AND OVER WITH DIABETES						TOTAL PERCENT
	PERCENT OF ADULTS WITH DIABETES WHO WERE LATINO	PERCENT OF ADULTS WITH DIABETES WHO WERE AIAN	PERCENT OF ADULTS WITH DIABETES WHO WERE ASIAN	PERCENT OF ADULTS WITH DIABETES WHO WERE AFRICAN AMERICAN	PERCENT OF ADULTS WITH DIABETES WHO WERE WHITE	PERCENT OF ADULTS WITH DIABETES WHO WERE OTHER	
CALIFORNIA	34.2	1.0	10.5	9.4	42.8	2.2	100
NORTHERN/SIERRA	11.6	4.8	2.9*	1.3*	76.0	3.5	100
GREATER BAY AREA	18.1	0.7*	17.9	14.6	46.5	2.4	100
SACRAMENTO	17.8	-	12.8	12.9	52.0	3.5*	99
SAN JOAQUIN VALLEY	44.2	2.6	3.6	6.1	41.8	1.9	100
CENTRAL COAST	35.9	-	6.4*	4.0*	51.9	1.7	100
LOS ANGELES COUNTY	45.6	0.6*	10.6	11.9	30.1	1.4	100
OTHER SOUTHERN CALIFORNIA COUNTIES	34.8	0.9*	9.7	6.1	45.8	2.8	100

* Unstable estimate. Dash (-) indicates the sample size is too small to provide an estimate.

Totals may not add to 100% due to rounding.

Confidence intervals and other supplemental materials are available at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

Source: 2001 and 2003 California Health Interview Surveys

**EXHIBIT 8. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH DIABETES
BY COUNTY, CALIFORNIA 2003**

LOCATION	TOTAL PERCENT OF ADULTS WITH DIABETES	TOTAL NUMBER OF ADULTS WITH DIABETES	ADULTS AGE 18 AND OVER WITH DIABETES		
			PERCENT OF ADULTS WITH DIABETES WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH DIABETES WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH DIABETES WHO WERE AGE 65 AND OVER
CALIFORNIA	6.6	1,678,000	45.6	26.6	37.0
ALAMEDA	5.1	57,000	37.1	23.6	35.0
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	7.0	10,000	40.8	33.0*	39.6
BUTTE	4.3	7,000	63.2	38.8	41.8
COLUSA, GLENN, TEHAMA	7.6	6,000	38.3	24.7*	39.4
CONTRA COSTA	5.8	43,000	19.8	29.3*	39.4
DEL NORTE, HUMBOLDT	6.0	7,000	56.6	41.1	53.5
EL DORADO	4.3	5,000	36.8	23.4*	29.1*
FRESNO	7.6	44,000	70.0	48.7	39.4
IMPERIAL	10.9	11,000	66.0	49.8	44.1
KERN	7.3	35,000	55.1	37.3	19.9*
KINGS	8.1	7,000	74.9	36.9	26.0
LAKE, MENDOCINO	6.3	7,000	51.8	36.8	29.0*
LASSEN, MODOC, SISKIYOU, TRINITY	6.7	5,000	37.4	18.8*	35.3
LOS ANGELES	6.9	491,000	51.3	27.3	35.7
LA SPA ANTELOPE VALLEY	5.1	10,000	54.0	37.7	33.1
LA SPA EAST	8.3	74,000	48.2	21.2	34.5
LA SPA METRO	6.2	54,000	70.0	37.3	38.8
LA SPA SAN FERNANDO	7.2	107,000	44.6	26.6	40.8
LA SPA SAN GABRIEL	6.3	80,000	43.9	27.4	40.7
LA SPA SOUTH	9.6	53,000	66.4	41.9	22.0
LA SPA SOUTH BAY	7.2	87,000	49.0	20.5	30.8
LA SPA WEST	4.1	24,000	47.7	15.0*	41.6
MADERA	9.8	9,000	41.9	32.9	42.1
MARIN	3.7*	7,000	41.7	18.8*	82.2
MERCED	9.7	15,000	61.5	35.6	27.1
MONTEREY, SAN BENITO	6.2	20,000	44.5	19.7*	36.5
NAPA	5.1	5,000	10.9	-	24.0*
NEVADA, PLUMAS, SIERRA	3.9	4,000	53.6	16.9*	66.0

**EXHIBIT 8. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH DIABETES
BY COUNTY, CALIFORNIA 2003 (CONTINUED)**

LOCATION	TOTAL PERCENT OF ADULTS WITH DIABETES	TOTAL NUMBER OF ADULTS WITH DIABETES	ADULTS AGE 18 AND OVER WITH DIABETES		
			PERCENT OF ADULTS WITH DIABETES WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH DIABETES WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH DIABETES WHO WERE AGE 65 AND OVER
CALIFORNIA	6.6	1,678,000	45.6	26.6	37.0
ORANGE	6.6	143,000	43.1	23.6	38.2
PLACER	5.5	12,000	24.6	21.2*	49.3
RIVERSIDE	6.1	74,000	41.7	23.8	50.7
SACRAMENTO	8.2	79,000	41.0	27.5	33.0
SAN BERNARDINO	8.5	107,000	48.7	35.4	32.8
SAN DIEGO	6.0	130,000	42.3	18.3	30.0
SAN FRANCISCO	6.5	42,000	33.9	25.6	50.8
SAN JOAQUIN	7.6	32,000	49.3	29.4*	26.5
SAN LUIS OBISPO	4.2	8,000	21.1	18.4*	59.8
SAN MATEO	5.4	29,000	43.9	32.3*	44.7
SANTA BARBARA	5.4	16,000	39.5	28.6*	47.4
SANTA CLARA	5.5	70,000	35.3	9.5*	33.9
SANTA CRUZ	4.1	8,000	34.6	17.2*	40.4*
SHASTA	9.0	12,000	44.1	34.7	52.4
SOLANO	6.5	19,000	33.6	22.7*	51.1
SONOMA	5.2	18,000	42.2	28.3*	44.1
STANISLAUS	5.9	20,000	37.4	20.0*	18.2*
SUTTER, YUBA	8.7	9,000	46.2	33.7	38.3
TULARE	8.7	23,000	66.0	34.7	32.6
VENTURA	5.1	29,000	37.1	20.8*	52.5
YOLO	6.2	8,000	45.6	10.1*	38.0

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Source: 2003 California Health Interview Survey

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

FAIR OR POOR HEALTH STATUS SUMMARY

Statewide Characteristics

- In 2003, one-fifth of adults over 18 in California reported that their health was fair or poor (Exhibit 10).
- Three out of five of the over 5.2 million adults with fair or poor health status were low-income (below 200% of the Federal Poverty Level; Exhibit 10).
- Almost one-fourth of the state's adults with fair or poor health status were age 65 or over (Exhibit 10).

Racial and Ethnic Characteristics

- Among adults age 18 and over who reported fair or poor health status, the racial/ethnic distribution was 46.1% Latino, 0.8% American Indian/Alaska Native, 11.4% Asian, 7% African American, 32.8% white, and 1.9% other (Exhibit 9). Since this is the racial/ethnic composition of the population with fair or poor health status, it cannot be used to make between group comparisons.
- In the San Joaquin Valley, Central Coast and Los Angeles County over half of adults with fair or poor health status were Latino (Exhibit 9).

County Specific Characteristics

- In 2003, almost eight out of ten adults in LA SPA Metro and three out of four adults in LA SPA South with fair or poor health status were low-income—the highest proportions in the state (Exhibit 10).
- Almost half of adults with fair or poor health status in Imperial County had Medi-Cal (Exhibit 10).
- 44.4% of adults with fair or poor health status in Marin were over the age of 65—the highest proportion in the state. The lowest proportion was found in LA SPA South (13.5%; Exhibit 10).

**EXHIBIT 9. RACIAL AND ETHNIC CHARACTERISTICS OF ADULTS AGE 18 AND OVER
WITH FAIR OR POOR HEALTH STATUS BY REGION, CALIFORNIA 2001 AND 2003 COMBINED**

LOCATION	ADULTS AGE 18 AND OVER WITH FAIR OR POOR HEALTH STATUS						TOTAL PERCENT
	PERCENT OF ADULTS W/FAIR OR POOR HEALTH STATUS WHO WERE LATINO	PERCENT OF ADULTS W/FAIR OR POOR HEALTH STATUS WHO WERE AIAN	PERCENT OF ADULTS W/FAIR OR POOR HEALTH STATUS WHO WERE ASIAN	PERCENT OF ADULTS W/FAIR OR POOR HEALTH STATUS WHO WERE AFRICAN AMERICAN	PERCENT OF ADULTS W/FAIR OR POOR HEALTH STATUS WHO WERE WHITE	PERCENT OF ADULTS W/FAIR OR POOR HEALTH STATUS WHO WERE OTHER	
CALIFORNIA	46.1	0.8	11.4	7.0	32.8	1.9	100
NORTHERN/SIERRA	14.7	2.7	1.4	1.4*	76.6	3.2	100
GREATER BAY AREA	33.3	0.4*	22.4	10.4	31.5	2.0	100
SACRAMENTO	25.1	1.5*	12.1	6.8	50.7	3.8	100
SAN JOAQUIN VALLEY	51.3	1.8	5.0	4.8	35.7	1.3	100
CENTRAL COAST	54.1	1.0	4.4	2.1	37.0	1.3	100
LOS ANGELES COUNTY	56.1	0.3	11.0	9.5	21.7	1.4	100
OTHER SOUTHERN CALIFORNIA COUNTIES	46.5	0.8	10.2	4.5	35.6	2.5	100

* Unstable estimate.

Source: 2001 and 2003 California Health Interview Surveys

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

EXHIBIT 10. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH FAIR OR POOR HEALTH STATUS BY COUNTY, CALIFORNIA 2003

LOCATION	TOTAL PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS	TOTAL NUMBER OF ADULTS WITH FAIR/POOR HEALTH STATUS	ADULTS AGE 18 AND OVER WITH FAIR OR POOR HEALTH STATUS		
			PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS WHO WERE AGE 65 AND OVER
CALIFORNIA	20.5	5,252,000	60.3	28.6	24.5
ALAMEDA	17.8	197,000	53.3	25.1	24.8
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	22.2	31,000	48.7	23.5	35.7
BUTTE	19.2	30,000	63.8	39.1	31.9
COLUSA, GLENN, TEHAMA	28.2	21,000	58.3	27.2	28.2
CONTRA COSTA	16.8	123,000	43.3	36.3	26.6
DEL NORTE, HUMBOLDT	18.8	21,000	66.1	42.3	29.7
EL DORADO	14.1	18,000	33.2	11.3*	21.8
FRESNO	27.4	159,000	73.4	39.4	18.7
IMPERIAL	30.3	31,000	72.5	48.5	25.9
KERN	27.8	132,000	63.2	36.4	22.3
KINGS	27.1	23,000	66.5	41.2	21.3
LAKE, MENDOCINO	22.9	26,000	66.1	37.2	23.5
LASSEN, MODOC, SISKIYOU, TRINITY	22.0	15,000	64.2	34.6	36.7
LOS ANGELES	23.6	1,680,000	65.7	29.4	22.6
LA SPA ANTELOPE VALLEY	19.5	40,000	62.0	39.0	23.8
LA SPA EAST	23.6	212,000	60.9	22.4	25.0
LA SPA METRO	27.8	243,000	79.1	34.5	21.7
LA SPA SAN FERNANDO	21.3	319,000	63.3	30.8	26.2
LA SPA SAN GABRIEL	24.9	318,000	62.6	29.3	25.9
LA SPA SOUTH	35.0	193,000	76.3	38.5	13.5
LA SPA SOUTH BAY	22.7	277,000	62.2	24.9	21.1
LA SPA WEST	13.2	78,000	47.3	16.8	18.9
MADERA	27.7	24,000	59.6	33.2	25.4
MARIN	9.9	19,000	32.2	21.2*	44.4
MERCED	27.3	42,000	67.4	29.6	23.1
MONTEREY, SAN BENITO	23.9	78,000	67.6	29.3	19.3
NAPA	16.2	15,000	53.2	11.6*	21.4
NEVADA, PLUMAS, SIERRA	12.9	12,000	59.4	27.6	34.6

EXHIBIT 10. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS WITH FAIR OR POOR HEALTH STATUS BY COUNTY, CALIFORNIA 2003 (CONTINUED)

LOCATION	TOTAL PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS	TOTAL NUMBER OF ADULTS WITH FAIR/POOR HEALTH STATUS	ADULTS AGE 18 AND OVER WITH FAIR OR POOR HEALTH STATUS		
			PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS WHO HAD MEDI-CAL	PERCENT OF ADULTS WITH FAIR/POOR HEALTH STATUS WHO WERE AGE 65 AND OVER
CALIFORNIA	20.5	5,252,000	60.3	28.6	24.5
ORANGE	20.5	443,000	60.4	20.4	19.3
PLACER	11.4	24,000	41.3	31.8	42.6
RIVERSIDE	21.0	254,000	56.0	23.9	26.4
SACRAMENTO	15.5	148,000	53.7	36.0	26.3
SAN BERNARDINO	22.6	284,000	64.0	33.7	23.8
SAN DIEGO	15.4	335,000	55.9	25.0	28.3
SAN FRANCISCO	17.2	112,000	51.4	31.7	40.6
SAN JOAQUIN	19.9	84,000	59.9	23.4	23.9
SAN LUIS OBISPO	15.9	30,000	53.2	24.2	29.2
SAN MATEO	18.2	98,000	50.0	24.0	23.4
SANTA BARBARA	20.5	60,000	56.8	27.1	21.8
SANTA CLARA	18.4	231,000	47.7	22.0	23.7
SANTA CRUZ	18.7	36,000	48.3	27.3	19.2
SHASTA	21.4	28,000	58.9	39.3	36.3
SOLANO	20.3	58,000	48.0	26.2	31.1
SONOMA	13.7	48,000	56.4	27.6	38.9
STANISLAUS	19.4	65,000	69.5	33.9	22.6
SUTTER, YUBA	24.6	25,000	51.3	35.5	23.2
TULARE	26.0	67,000	71.8	36.7	24.0
VENTURA	18.3	104,000	63.2	22.7	29.4
YOLO	15.0	20,000	56.8	19.0	29.6

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Source: 2003 California Health Interview Survey

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

ASTHMA AMONG ADULTS SUMMARY

Statewide Characteristics

- In 2001-03, 11.8% of California adults reported ever being diagnosed with asthma (Exhibit 12).
- Three out of ten of the over three million adults ever diagnosed with asthma were low-income (below 200% of the Federal Poverty Level; Exhibit 12).
- Elderly adults age 65 or over accounted for only 13% of adults ever diagnosed with asthma (Exhibit 12).

Racial and Ethnic Characteristics

- Among adults ever diagnosed with asthma in 2001-03, the racial/ethnic distribution was 21.9% Latino, 1.3% American Indian/Alaska Native, 8.9% Asian, 56.1 % white, and 3.5 % other (Exhibit 11). Since this is the racial/ethnic composition of the adult population with asthma, it cannot be used to make between group comparisons.
- The Northern/Sierra and San Joaquin Valley regions had over twice the statewide proportion of adults with asthma who were American Indian/Alaska Native (Exhibit 11).

County Specific Characteristics

- The rates of California adults ever diagnosed with asthma in 2001-03 ranged from 9.3 % in LA SPA Metro to 18.3% in Solano County (Exhibit 12).
- Over half of adults ever diagnosed with asthma in the Colusa/Glenn, Del Norte/Humboldt, Lassen/Modoc county groups, Kings County and LA SPA South had low-incomes (Exhibit 12).
- Nearly one-third of adults ever diagnosed with asthma had Medi-Cal in Imperial County and Merced County (Exhibit 12).
- Approximately one out of five adults ever diagnosed with asthma in Imperial County, the Nevada/Plumas county group and Shasta County were elderly (Exhibit 12).

EXHIBIT 11. RACIAL AND ETHNIC CHARACTERISTICS OF ADULTS AGE 18 AND OVER EVER DIAGNOSED WITH ASTHMA BY REGION, CALIFORNIA 2001 AND 2003 COMBINED

LOCATION	ADULTS AGE 18 AND OVER EVER DIAGNOSED WITH ASTHMA						TOTAL PERCENT
	PERCENT OF ADULTS WITH ASTHMA WHO WERE LATINO	PERCENT OF ADULTS WITH ASTHMA WHO WERE AIAN	PERCENT OF ADULTS WITH ASTHMA WHO WERE ASIAN	PERCENT OF ADULTS WITH ASTHMA WHO WERE AFRICAN AMERICAN	PERCENT OF ADULTS WITH ASTHMA WHO WERE WHITE	PERCENT OF ADULTS WITH ASTHMA WHO WERE OTHER	
CALIFORNIA	21.9	1.3	8.9	8.3	56.1	3.5	100
NORTHERN/SIERRA	6.3	4.1	1.2*	1.5*	83.0	3.9	100
GREATER BAY AREA	16.8	1.2	14.1	9.0	54.7	4.1	100
SACRAMENTO	11.2	1.5*	10.7	9.4	61.8	5.4	100
SAN JOAQUIN VALLEY	27.2	3.0	3.7	6.3	57.3	2.5	100
CENTRAL COAST	22.0	0.3*	4.9	4.4	65.7	2.6	100
LOS ANGELES COUNTY	29.1	0.5*	10.8	13.5	43.0	3.1	100
OTHER SOUTHERN CALIFORNIA COUNTIES	22.7	1.0	6.4	5.5	61.0	3.4	100

* Unstable estimate.

Source: 2001 and 2003 California Health Interview Surveys

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

EXHIBIT 12. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS EVER DIAGNOSED WITH ASTHMA BY COUNTY, CALIFORNIA 2001 AND 2003 COMBINED

LOCATION	TOTAL PERCENT OF ADULTS EVER DIAGNOSED WITH ASTHMA	TOTAL NUMBER OF ADULTS EVER DIAGNOSED WITH ASTHMA	ADULTS AGE 18 AND OVER EVER DIAGNOSED WITH ASTHMA		
			PERCENT OF ADULTS EVER DIAGNOSED WITH ASTHMA WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS 18-64 EVER DIAGNOSED WITH ASTHMA WHO HAD MEDI-CAL	PERCENT OF ADULTS EVER DIAGNOSED WITH ASTHMA WHO WERE AGE 65 AND OVER
CALIFORNIA	11.8	3,020,446	31.4	13.2	13.0
ALAMEDA	12.3	136,000	20.8	9.0	13.3
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	11.7	16,000	33.0	13.7	19.2
BUTTE	15.1	24,000	47.3	25.4	15.5
COLUSA, GLENN, TEHAMA	15.9	12,000	56.4	28.6	19.9
CONTRA COSTA	14.4	105,000	23.1	11.9	14.8
DEL NORTE, HUMBOLDT	16.7	19,000	52.2	22.7	6.8
EL DORADO	14.8	19,000	23.2	8.3*	13.0
FRESNO	15.4	89,000	43.1	18.7	11.4
IMPERIAL	11.4	12,000	44.3	32.7	20.0
KERN	13.7	65,000	44.3	25.7	13.7
KINGS	11.3	9,000	52.3	30.5	13.3
LAKE, MENDOCINO	14.3	16,000	47.1	30.5	19.7
LASSEN, MODOC, SISKIYOU, TRINITY	14.6	10,000	50.7	29.6	19.5
LOS ANGELES	10.7	760,000	34.7	13.2	13.6
LA SPA ANTELOPE VALLEY	14.5	30,000	30.3	19.5	9.8
LA SPA EAST	10.1	91,000	37.9	11.4	15.2
LA SPA METRO	9.3	81,000	41.8	11.9	12.7
LA SPA SAN FERNANDO	10.7	160,000	31.8	9.8	14.4
LA SPA SAN GABRIEL	10.0	128,000	34.5	14.3	15.8
LA SPA SOUTH	10.4	57,000	54.6	31.2	14.2
LA SPA SOUTH BAY	11.5	140,000	31.2	13.1	11.6
LA SPA WEST	12.0	70,000	21.2	5.2*	12.6
MADERA	14.5	13,000	40.7	27.7	14.8
MARIN	10.7	20,000	11.9	6.2*	16.1
MERCED	14.2	22,000	49.2	32.4	10.8
MONTEREY, SAN BENITO	11.0	36,000	26.3	12.9	11.2
NAPA	16.6	16,000	15.9	6.7*	12.8
NEVADA, PLUMAS, SIERRA	14.8	14,000	28.9	11.1*	23.9

EXHIBIT 12. LOW-INCOME, MEDI-CAL, AND AGE 65 AND OVER CHARACTERISTICS OF ADULTS EVER DIAGNOSED WITH ASTHMA BY COUNTY, CALIFORNIA 2001 AND 2003 COMBINED (CONTINUED)

LOCATION	TOTAL PERCENT OF ADULTS EVER DIAGNOSED WITH ASTHMA	TOTAL NUMBER OF ADULTS EVER DIAGNOSED WITH ASTHMA	ADULTS AGE 18 AND OVER EVER DIAGNOSED WITH ASTHMA		
			PERCENT OF ADULTS EVER DIAGNOSED WITH ASTHMA WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF ADULTS 18-64 EVER DIAGNOSED WITH ASTHMA WHO HAD MEDI-CAL	PERCENT OF ADULTS EVER DIAGNOSED WITH ASTHMA WHO WERE AGE 65 AND OVER
CALIFORNIA	11.8	3,020,446	31.4	13.2	13.0
ORANGE	9.5	206,000	22.5	7.2	11.2
PLACER	14.8	31,000	22.1	8.9*	10.8
RIVERSIDE	10.4	126,000	37.6	15.4	14.0
SACRAMENTO	14.5	138,000	27.4	12.5	14.0
SAN BERNARDINO	13.6	171,000	43.0	20.7	8.1
SAN DIEGO	10.5	228,000	27.0	9.9	13.1
SAN FRANCISCO	10.6	69,000	26.8	7.4	16.1
SAN JOAQUIN	14.0	59,000	39.5	19.5	11.4
SAN LUIS OBISPO	14.5	27,000	30.9	7.8	13.4
SAN MATEO	10.2	55,000	7.3*	2.4*	13.8
SANTA BARBARA	11.2	33,000	31.5	7.7*	16.6
SANTA CLARA	11.9	149,000	19.5	6.2	10.4
SANTA CRUZ	14.3	27,000	30.6	11.0*	10.8
SHASTA	15.5	20,000	47.5	22.1	21.1
SOLANO	18.3	52,000	30.8	12.1	13.7
SONOMA	13.1	46,000	19.1	6.3*	13.2
STANISLAUS	14.0	47,000	43.4	23.4	11.9
SUTTER, YUBA	13.1	13,000	45.9	19.3	15.6
TULARE	12.0	31,000	45.1	22.4	10.4
VENTURA	12.1	69,000	30.6	11.8*	13.8
YOLO	12.4	16,000	26.1	6.8*	13.6

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Source: 2003 California Health Interview Survey

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

ASTHMA AMONG CHILDREN SUMMARY

Statewide Characteristics

- In 2001-03, over 1.3 million children ages 1-17 (14.7%) reported ever being diagnosed with asthma (Exhibit 14).
- Four out of ten children with asthma lived in low-income families (below 200% of the Federal Poverty Level; Exhibit 14).
- Among children with asthma, 15.5% lived in households with at least one limited English proficient parent (Exhibit 14).
- Almost one-quarter of children with asthma had Medi-Cal (Exhibit 14).

Racial and Ethnic Characteristics

- Among children who reported ever being diagnosed with asthma in 2001-03, the racial/ethnic distribution was 39.4% Latino, 1.2% American Indian/Alaska Native, 7.9% Asian, 11.5% African American, 35.2% white, and 4.8% other (Exhibit 13). Since this information is on the characteristics of the population of children with asthma, it cannot be used to compare risk of asthma for different racial/ethnic groups.

- The highest proportion of children with asthma who were Latino was found in Los Angeles County—49.1% (Exhibit 13). In the Northern/Sierra region, 8.5% of children with asthma were American Indian/Alaska Native—seven times the statewide proportion (Exhibit 13). The Sacramento region had the highest proportion of children with asthma who were African American (18.7%; Exhibit 13). These rates provide information on the characteristics of children with asthma in each region and not on the risk of hypertension for different racial/ethnic groups.

County Specific Characteristics

- In 2001-03, about one-fifth of children had asthma in Kings, Sacramento, San Joaquin and Solano Counties—the highest prevalence in the state (Exhibit 14).
- About two-thirds of children with asthma in the Colusa/Glenn county group, Kings County and Tulare County were low-income (Exhibit 14).
- Over half of children ever diagnosed with asthma in LA SPA Metro lived in households with at least one limited English proficient (LEP) parent. One in three children ever diagnosed with asthma lived with at least one LEP parent in the Monterey/San Benito county group and Santa Barbara County (Exhibit 14).

EXHIBIT 13. RACIAL AND ETHNIC CHARACTERISTICS OF CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA BY REGION, CALIFORNIA 2001 AND 2003 COMBINED

LOCATION	CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA						TOTAL PERCENT
	PERCENT OF CHILDREN WITH ASTHMA WHO WERE LATINO	PERCENT OF CHILDREN WITH ASTHMA WHO WERE AIAN	PERCENT OF CHILDREN WITH ASTHMA WHO WERE ASIAN	PERCENT OF CHILDREN WITH ASTHMA WHO WERE AFRICAN AMERICAN	PERCENT OF CHILDREN WITH ASTHMA WHO WERE WHITE	PERCENT OF CHILDREN WITH ASTHMA WHO WERE OTHER	
CALIFORNIA	39.4	1.2	7.9	11.5	35.2	4.8	100
NORTHERN/SIERRA	14.7	8.5	-	1.2*	68.2	6.9	100
GREATER BAY AREA	27.4	-	16.9	9.4	39.1	7.0	100
SACRAMENTO	21.9	1.3*	3.9*	18.7	49.4	4.9	100
SAN JOAQUIN VALLEY	46.2	3.8*	2.3*	7.4	35.9	4.4	100
CENTRAL COAST	47.3	1.8*	3.3*	-	40.6	4.8	98
LOS ANGELES COUNTY	49.1	-	8.7	17.3	21.3	3.5	100
OTHER SOUTHERN CALIFORNIA COUNTIES	40.2	0.8*	6.6	10.6	37.6	4.3	100

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Totals may not add to 100% due to rounding.

Confidence intervals and other supplemental materials are available at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

Source: 2001 and 2003 California Health Interview Surveys

EXHIBIT 13. RACIAL AND ETHNIC CHARACTERISTICS OF CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA BY REGION, CALIFORNIA 2001 AND 2003 COMBINED

LOCATION	CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA						TOTAL PERCENT
	PERCENT OF CHILDREN WITH ASTHMA WHO WERE LATINO	PERCENT OF CHILDREN WITH ASTHMA WHO WERE AIAN	PERCENT OF CHILDREN WITH ASTHMA WHO WERE ASIAN	PERCENT OF CHILDREN WITH ASTHMA WHO WERE AFRICAN AMERICAN	PERCENT OF CHILDREN WITH ASTHMA WHO WERE WHITE	PERCENT OF CHILDREN WITH ASTHMA WHO WERE OTHER	
CALIFORNIA	39.4	1.2	7.9	11.5	35.2	4.8	100
NORTHERN/SIERRA	14.7	8.5	-	1.2*	68.2	6.9	100
GREATER BAY AREA	27.4	-	16.9	9.4	39.1	7.0	100
SACRAMENTO	21.9	1.3*	3.9*	18.7	49.4	4.9	100
SAN JOAQUIN VALLEY	46.2	3.8*	2.3*	7.4	35.9	4.4	100
CENTRAL COAST	47.3	1.8*	3.3*	-	40.6	4.8	98
LOS ANGELES COUNTY	49.1	-	8.7	17.3	21.3	3.5	100
OTHER SOUTHERN CALIFORNIA COUNTIES	40.2	0.8*	6.6	10.6	37.6	4.3	100

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Totals may not add to 100% due to rounding.

Confidence intervals and other supplemental materials are available at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

Source: 2001 and 2003 California Health Interview Surveys

EXHIBIT 14. LOW-INCOME, LIMITED ENGLISH PROFICIENT PARENTS, AND MEDI-CAL CHARACTERISTICS OF CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA BY COUNTY, CALIFORNIA 2001 AND 2003 COMBINED

LOCATION	TOTAL PERCENT OF CHILDREN WITH ASTHMA	TOTAL NUMBER OF CHILDREN WITH ASTHMA	CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA		
			PERCENT OF CHILDREN WITH ASTHMA WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF CHILDREN WITH ASTHMA WHO HAD LEP PARENTS	PERCENT OF CHILDREN WITH ASTHMA WHO HAD MEDI-CAL
CALIFORNIA	14.7	1,326,000	41.4	15.5	24.2
ALAMEDA	16.5	56,000	26.5	8.4*	14.7
ALPINE, AMADOR, CALAVERAS, INYO, MARIPOSA, MONO, TUOLUMNE	13.1	5,000	30.9	-	27.0*
BUTTE	18.8	8,000	55.7	-	32.0
COLUSA, GLENN, TEHAMA	14.7	4,000	66.9	19.8*	46.2
CONTRA COSTA	17.2	43,000	29.3	-	19.0
DEL NORTE, HUMBOLDT	14.3	5,000	40.5	-	21.3*
EL DORADO	15.6	6,000	20.8	-	11.0*
FRESNO	18.1	44,000	42.9	14.7	33.1
IMPERIAL	17.7	8,000	44.5	21.9	34.1
KERN	16.2	33,000	39.2	-	33.7
KINGS	20.8	8,000	65.7	10.9*	38.8
LAKE, MENDOCINO	11.2	4,000	62.4	-	45.3
LASSEN, MODOC, SISKIYOU, TRINITY	11.8	2,000	56.8	-	22.7*
LOS ANGELES	13.7	357,000	49.4	21.4	30.2
LA SPA ANTELOPE VALLEY	17.5	18,000	50.3	6.4*	32.5
LA SPA EAST	14.1	58,000	50.5	21.8	24.5
LA SPA METRO	11.4	29,000	61.4	52.3	52.3
LA SPA SAN FERNANDO	12.7	73,000	39.6	20.7	21.6
LA SPA SAN GABRIEL	15.1	71,000	52.5	19.3	25.7
LA SPA SOUTH	12.3	33,000	71.9	19.4*	63.2
LA SPA SOUTH BAY	14.4	59,000	40.4	19.6	20.4
LA SPA WEST	15.5	18,000	41.4	8.8*	30.0
MADERA	14.1	5,000	55.5	29.7	39.6
MARIN	13.2	6,000	35.0	-	-
MERCED	17.8	13,000	51.2	15.8*	26.7
MONTEREY, SAN BENITO	14.2	18,000	32.9	34.4	13.9*
NAPA	15.9	5,000	39.9	-	15.2*
NEVADA, PLUMAS, SIERRA	14.8	4,000	34.7	-	11.8*

EXHIBIT 14. LOW-INCOME, LIMITED ENGLISH PROFICIENT PARENTS, AND MEDICAL CHARACTERISTICS OF CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA BY COUNTY, CALIFORNIA 2001 AND 2003 COMBINED (CONTINUED)

LOCATION	TOTAL PERCENT OF CHILDREN WITH ASTHMA	TOTAL NUMBER OF CHILDREN WITH ASTHMA	CHILDREN AGES 1-17 EVER DIAGNOSED WITH ASTHMA		
			PERCENT OF CHILDREN WITH ASTHMA WHO WERE LOW-INCOME (0-199% FPL)	PERCENT OF CHILDREN WITH ASTHMA WHO HAD LEP PARENTS	PERCENT OF CHILDREN WITH ASTHMA WHO HAD MEDI-CAL
CALIFORNIA	14.7	1,326,000	41.4	15.5	24.2
ORANGE	13.1	98,000	35.3	22.7	13.3
PLACER	14.8	10,000	19.2*	-	-
RIVERSIDE	11.3	55,000	28.9	-	12.9
SACRAMENTO	19.9	67,000	39.7	10.5	34.0
SAN BERNARDINO	17.1	93,000	53.7	11.9	33.9
SAN DIEGO	13.1	91,000	42.6	16.9	18.2
SAN FRANCISCO	15.1	16,000	35.1	-	15.6*
SAN JOAQUIN	19.8	35,000	49.4	-	26.6
SAN LUIS OBISPO	16.3	8,000	38.1	-	24.4*
SAN MATEO	12.1	19,000	12.7*	-	-
SANTA BARBARA	14.2	14,000	44.8	34.8	23.0*
SANTA CLARA	14.9	60,000	33.9	21.1	21.1
SANTA CRUZ	13.2	8,000	34.9	-	23.1*
SHASTA	14.1	6,000	45.5	-	46.7
SOLANO	21.2	23,000	18.6	-	7.7*
SONOMA	18.0	19,000	21.9	-	6.9*
STANISLAUS	12.0	17,000	42.7	-	23.8*
SUTTER, YUBA	13.6	5,000	54.0	-	29.9
TULARE	17.8	21,000	63.3	17.3	40.8
VENTURA	11.8	25,000	18.2*	-	7.3*
YOLO	16.4	7,000	39.0	-	16.0*

* Unstable estimate. Dash (-) indicates the sample size is too small to provide any estimate.

Source: 2003 California Health Interview Survey

Confidence intervals and other supplemental materials are available at:
http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html

DATA SOURCE

The health data used in this report are from the California Health Interview Surveys (CHIS 2001 and CHIS 2003). CHIS collects health information from California's non-institutionalized population through a random digit dial telephone survey administered in multiple languages. CHIS surveys California children, adolescents and adults. For children under the age of 12, the adult most knowledgeable about that child's health in a household is interviewed. Ethnic and geographic over-samples allow CHIS to provide reliable and accurate local area health estimates.

This report relies on CHIS 2003 data, but when sample sizes were too small to produce stable estimates, CHIS 2001 and CHIS 2003 data were combined to create a larger effective sample. Combining years was necessary for all racial and ethnic characteristics, and for adults and children ever diagnosed with asthma. The total number of adults or children ever diagnosed with asthma was calculated by applying the average rate to the 2003 population.

Chronic Conditions Indices and Access Indicators

- The Percentage of One or More Chronic Conditions Among Adults Age 18 and Over (Exhibit 1, Column 1) reports the proportion of adults self-reporting at least one of the five following conditions: physician diagnosed heart disease; hypertension; asthma; diabetes; and/or self-assessed fair or poor health (Exhibit 1, Map 1).
- The Percentage of One or More Chronic Conditions Among Children Ages 1-17 (Exhibit 1, Column 2) reports the proportion of children with at least one of the following: ever diagnosed by a physician with asthma and/or parent-assessed fair or poor

health. This index is presented in Exhibit 1 and on a map available online at:

www.healthpolicy.ucla.edu/chronic_cond_supp_05.html.

- The Percentage of Adults with One or More Problems Accessing Health Services reports the proportion of adults who experienced at least one of the following: a delay accessing health services in the past year; and/or having no usual source of care (Exhibit 1, Map 2).
- The Percentage of Adults with One or More Barriers to Health Care Access reports the proportion of adults who reported at least one of the following: being uninsured anytime in the past year; limited English proficiency; and/or having a low-income (Exhibit 1, Map 3).
- The Composite of Chronic Conditions and Access Indicators is a seven indicator summary index of the five chronic conditions among adults, problems accessing health services, and barriers to health care access. It tallies the number of conditions and indicators that fall into the best two and the worst two quintiles in each county and Los Angeles Service Planning Area (Exhibit 2).

The rates presented in each summary index listed above were ranked from lowest to highest. Relative rankings were assigned by dividing the data into five quintiles with roughly the same number of counties per group. Group one represents counties with the lowest (best) prevalence rates and group five represents counties with the highest (worst) prevalence rates.

Health Variables

Chronic conditions: For each of the following chronic conditions the respondent was asked whether a doctor has ever told them that they have had the particular health condition: heart disease, hypertension, diabetes

and asthma. The *fair* or *poor health status* variable combines the worst two responses to the question “Would you say that in general your health is excellent, very good, good, fair, or poor?”

Demographic Variables

Race/Ethnicity: To facilitate using this data with available county demographic data, California Department of Finance (DOF) race categories were used to generate race data. Due to small sample sizes for some race groups in some regions, CHIS 2001 and CHIS 2003 combined data were used. The Non-Latino Other single race and Non-Latino Two or more races were combined in this report into the “Other” category.

Low-Income: Low-income is defined as having a family household income in the previous year that is below 200% of the Federal Poverty Level (FPL). In 2002 this was \$30,040 for a family of three.

Insurance: Medi-Cal: Includes respondents who reported that they had Medi-Cal coverage during the past year.
Uninsured: The “uninsured anytime in the past year” variable was used in the one or more barriers to health care access indicator and each uninsured analysis presented online.

Limited English Proficiency (LEP): Respondents who spoke a language other than English at home were asked whether they speak English very well, well, not well, or not at all. Those who responded “not well or not at all” were classified as being limited English proficient. This variable was used in the one or more barriers to health care access indicator and each LEP analysis presented online.

Supressed Data

A dash denotes that data are not presented when there are fewer than five respondents for any cell.

An asterisk denotes an unstable (i.e. unreliable) estimate. The rates presented in this report are estimates based on a sample of California respondents. Each estimate has a level of error associated with it and a range in which the true estimate falls. The range, or 95% confidence interval, for the estimate is a statistic that approximates the point estimates that would be obtained 95 out of 100 times if the same survey were repeated with a new sample in the same population. An unstable estimate exceeds the generally acceptable amount of variation (30%) as measured by the coefficient of variation. Confidence intervals for the data in this report are available on-line at: http://www.healthpolicy.ucla.edu/chronic_cond_supp_05.html.

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ACKNOWLEDGEMENTS

The California HealthCare Foundation funded the analysis and publication of this report. The authors thank Y. Jenny Chia, Yii-Chieh Huang, and Yan Xiong for their statistical support. The authors also appreciate the valuable contributions of reviewers Veenu Aulakh, Andrew Bindman, Carolyn Mendez-Luck and Ying Ying Meng.

Sheri Penney of Penney Layne Productions provided editing and production services and Donna Beilock of Ikkanda Design Group provided design and production assistance.



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