## TRENDS IN THE HEALTH <br> OF OLDER CALIFORNIANS:

Data from the 2001, 2003 and 2005
California Health Interview Surveys
November 2008


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## Introduction

alifornia's population is growing older. This year over 250,000 Californians will celebrate their 65th birthday. When the Baby Boom generation starts to enter old age in 2011 the pace will quicken. As a result, the current population of 3.9 million older adults is projected to double over the next 18 years.

Understanding the current health status and trends in the health status of the older population is crucial in planning for the future. We can reduce the impact of our aging population on the state's health care infrastructure if we work to keep the older population healthy. Keeping older Californians healthy is also an investment in the state since healthy older adults are better able to help out their families, contribute to civic life and play a vital role in the wellbeing of our state.

Trends in the Health of Older Californians has good news. The use of several preventive services among the older population has been increasing over the past four years. In particular, improved screening rates for several types of cancer will lead to earlier diagnosis, making treatment both easier and more successful. This will have a long-term payoff in improved health and decreased mortality.

Trends in the Health of Older Californians documents the changes in the behavior of doctors and older adults when provided significant new health information. The Women's Health Initiative, a large national study, reported in July 2002 that women taking hormone replacement therapy (HRT) were at an increased risk of cardiovascular disease and breast cancer. ${ }^{1}$ The subsequent drop in older California women taking HRT between 2001 and 2005 is dramatic.

Trends in the Health of Older Californians also documents several worrisome changes between 2001 and 2005. The health status of the population declined in a number of areas. Older adults were more likely to report cancer, diabetes, high blood pressure, high cholesterol, needing help for emotional problems and obesity. The use of medical care services also increased, including the percent of older adults with an emergency room visit and with monthly or more frequent doctor visits. This suggests a growing demand on the health care system unless there is an increased focus on prevention efforts.

Racial and ethnic health disparities at the state level are striking for some health conditions. In 2005, diabetes and obesity were almost twice as high among older Latinos and African Americans than among older non-Latino whites. Latinos, Asian Americans and African Americans also reported substantially worse self-reported health. In addition, older Latinos, African Americans and Asian Americans are three times more likely to be food insecure.

The challenge to the health care sector is shown by the differences between older Californians in 2005 with Medicare and Medi-Cal in comparison to those with Medicare and other plans (mostly private supplemental insurance plans, often called Medi-gap). Older Californians with Medicare/Medi-Cal were the most likely of all insurance types to have fair/poor health status, diabetes, heart disease, high blood pressure, high cholesterol, and need help for emotional/mental health problems. This group also had the highest health risks, with the lowest fruit and vegetable intake, and highest food insecurity and obesity rates. Medicare/Medi-Cal recipients also had the highest rates of emergency room visits and 12 or more doctor visits per year. This suggests the need for comprehensive disease management programs under Medi-Cal for older adults.

[^0]County-level trends are harder to identify statistically because there are fewer older adults in each county. Nonetheless, the San Joaquin Valley region of the state is notable for its increase in diabetes. The proportion of older adults reporting diabetes in the San Joaquin region increased from one in six in 2001-just above the state average-to the highest in the state, with one in four of all older adults reporting that they have diabetes in 2005 . The San Joaquin Valley is also notable because it is the only region of the state where mammography rates worsened between 2001 and 2005, whereas in every other region the proportion of older women without a recent mammogram decreased. The San Joaquin Valley also has particularly high rates of fair and poor self-reported health, sedentary lifestyle, obesity and falls.

These health trends paint a complex picture for Californians age 65 and older. Although there was an overall increase in preventive screening behaviors between 2001 and 2005, there was also a decrease in health status for several key health indicators. These health status changes, especially increased diabetes and blood pressure, are likely influenced by the increased obesity and reduced physical activity in all ages. ${ }^{2}$ Some of the increase may be explained by more frequent contact with medical professionals that can lead to increased diagnosis of health conditions. Finally, racial and ethnic differences may be explained by differences in the economic and social stresses experienced by different groups, as well as by differences in access to health services that influence health status. Trends in the Health of Older Californians supports the need for services that target at-risk ethnic and regionally-vulnerable subgroups in order to provide more sustained prevention and treatment plans for California's older population.

[^1]For data on indicators, populations or years not presented in this volume, the on-line data query system AskCHIS may be able to provide information. See bttp://www.chis.ucla.edu/main/default.asp.

Map 1. Age 65 and Over as Percentage of Total Population, California Counties 2005 (label in each county shows number of people age 65 and over)


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

Source: Population Division, U.S. Census Bureau, 2005 for counties and regions and CHIS 2005 for LA SPAs.

Map 2. Percentage of Self-Reported Health As Fair or Poor, Age 65 and Over, California Counties 2005



## Demographic Highlights About Older Adults from the 2001 and 2005 California Health Interview Surveys

alifornia is home to the largest number of older people in the country with 3.9 million residents age 65 and over in 2005, an increase of 0.2 million from 2001. Older Californians account for $10.7 \%$ of the state's total population (Exhibit 1).

The elderly population in California is getting older. While the number in each age group (65-74, 75-84, and 85 and over) increased between 2001 and 2005, the number in the 75-84 population grew the fastest. As a result, a larger proportion of older adults are in the 75-84 year age range. In 2005 almost two in five older Californians were between 75 and 84 years old. When the Baby Boom generation starts to join the older population in 2011, the average age of the elderly population will temporarily decline due to the influx of large numbers of older adults at the lower end of the age range.

California's population of older adults is becoming increasingly diverse. In 2001, almost $69 \%$ of the population age 65 and over was non-Latino white, dropping to $66 \%$ by 2005 . The population of older Latinos and Asian American/Pacific Islanders grew during this time, while other groups did not change a statistically significant amount. The trend of increasing diversity in the older population will continue, with non-Latino whites projected to comprise less than half of the state's older population by 2030. The most dramatic growth is projected for Latino older adults, followed by Asian Americans. ${ }^{3}$

The percentage of older adults with low incomes fell between 2001 and 2005. The rates of older adults in households with incomes near and below the federal poverty level ( $0-199 \%$ FPL) both declined, mirroring national trends. But onethird of older Californians remained poor or near poor in 2005, numbering over 1.3 million older adults. It is also important to note that there were about twice as many older adults who were near poor (100-199\% FPL) as there were poor (0-99\% FPL). Near-poor older adults were almost all income insecure, meaning that they did not have sufficient income to meet basic needs while living independently. ${ }^{4}$

There were no significant changes in the English proficiency level or the health insurance coverage of California's older adult population. About one in ten older Californians speak English not well or not at all. About one in five continue to have both Medicare and MediCal; one in ten have Medicare only, other coverage only or are uninsured. Two out of every three older adults have Medicare and other coverage, which is mostly private supplemental insurance.

[^2]Exhibit 1. Demographics of Older Adults from the 2001 and 2005 California Health Interview Surveys

|  | 2001 |  | 2005 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Population Size }^{\dagger} \\ & (x 1000) \end{aligned}$ | \% | Population Size ${ }^{\dagger}$ $(x \quad 1000)$ | \% |
| Age Group |  |  |  |  |
| Ages 65-74 | 1876 | 52.6 | 1971 | 50.9 |
| Ages 75-84 | 1317 | 36.9 | 1516 | 39.1 |
| Age 85+ | 372 | 10.4 | 386 | 10.0 |
|  |  |  |  |  |
| Gender |  |  |  |  |
| Male | 1533 | 43.0 | 1686 | 43.5 |
| Female | 2032 | 57.0 | 2186 | 56.5 |
|  |  |  |  |  |
| Race/Ethnicity |  |  |  |  |
| White, Non-Latino | 2446 | 68.6 | 2562 | 66.2 |
| Latino | 502 | 14.1 | 604 | 15.6 |
| Asian American \& Pacific Islander | 385 | 10.8 | 464 | 12.0 |
| African American | 181 | 5.1 | 184 | 4.8 |
| Other | 51 | 1.4 | 58 | 1.5 |


| English Proficiency Level |
| :--- |
| Limited |
| Proficient |


| Income as Percent of Federal Poverty Level (FPL) |
| :--- |
| $0-99 \%$ FPL |
| $100-199 \%$ FPL |
| $200 \%+$ FPL |
| Type of Health Coverage |
| Medicare and Medi-Cal |
| Medicare and Other |

[^3]

# Health Status, Health Risks and Use of Health Services by Selected Characteristics, Age 65 and Over, California 2001 and 2005 

 overview of key findings on the health status, health risks, and preventive care and health service use of older people statewide in California for 2001 and 2005. It documents declines in several health status indicators, mixed trends in health risks, an improvement in preventive health services, and an increase in overall health services use (Exhibit 2).
## Health Status

The health status of older adults, overall, declined between 2001 and 2005. The proportion of individuals with cancer, skin cancer, diabetes, use of diabetic pills and high blood pressure increased significantly among the total population of adults age 65 and older. High blood pressure had the biggest increase over the four years. The rate of older Californians with high blood pressure increased by $6.7 \%$ overall, and it increased for both genders and most ethnic groups. The change was particularly striking for older Latinos. Heart disease was the only condition with a significant decrease among all older adults.

Women had increased rates of more health conditions than men. Among women only, there were significant increases in asthma, skin cancer, diabetes, and a need for emotional/ mental help. Among men only, there was a significant increase in cancer other than skin cancer. Both genders exhibited increases in diabetes, high blood pressure and high cholesterol.

Older racial and ethnic minority groups had few health status changes between 2001 and 2005 that were statistically different. Fair/poor health increased among older Asian Americans and decreased among older African Americans. High cholesterol increased among both Asian- and AfricanAmerican older adults. High blood pressure increased among older Latinos, and the need for mental health care
increased among Asian Americans. While there were comparatively few changes in the health status of ethnic and racial minority older adults compared to the number of changes among older non-Latino whites, a consistent pattern of health disparities remains among older Californians that mirrors national findings. Older African Americans and Latinos, in particular, have substantially higher rates of selfreported poor health, diabetes and high-blood pressure than older non-Latino whites.

Diabetes is increasing among many groups of older adults. It has significantly increased particularly among women, nonLatino whites, individuals with low incomes, and individuals with Medicare and other coverage. Diabetes prevention and control has become a national priority, and given that the rate of diabetes increases with age, the older adult population should be a priority focus of those efforts.

The increases in the rates of health problems across many groups of older Californians shows the need for both additional attention to preventive measures, as well as increased need for adequate access to care, so that the conditions such as diabetes and high blood pressure are less likely to cause common secondary health problems such as heart disease.

## Health Risks

There are several common behavioral risk factors that increase the chances of a number of different diseases and disability. Lack of fruit and vegetable consumption is associated with cancer and other chronic disease risks, food insecurity (not being able to reliably put food on the table) is associated with a variety of nutritional risks, obesity (body mass index of 30 and over) and being sedentary are associated with disability and several chronic conditions, and using hormone replacement therapy was recently shown to elevate the risk of heart disease and breast cancer. In an effort to reduce disease and disability, it is better to reduce these
common health risks rather than waiting for an older adult to get a disease and then treat it.

The most common fruit and vegetable consumption recommendation has been five servings per day. ${ }^{5}$ This level of consumption improved among older men but worsened among older women. The gender gap grew to almost a $15 \%$ difference, with men eating more fruits and vegetables than women, which may be due-in part-to their higher total food consumption.

Obesity increased among older women but not among older men. It also appears to be increasing among non-poor older adults, since the rate increased significantly among those with incomes over $200 \%$ of poverty and among those with Medicare and other insurance (mostly private Medi-gap insurance). Obesity rates vary by more factors than just being sedentary. About $30 \%$ of older Latinos but only $7 \%$ of older Asian Americans were obese in 2005, while rates of no physical activity vary much less. While physical activity is an important component of weight control, it should be promoted in all populations of older adults since physical activity has significant health benefits independent of weight control. ${ }^{6}$

The use of hormone replacement therapy (HRT) decreased dramatically for women across all demographic groups. This is primarily the result of changing medical knowledge about the health risks associated with HRT. Nationally, prescriptions for HRT declined significantly after the results from the Women's Health Study were released and marketing efforts for the therapy shrank substantially. ${ }^{7}$ It is likely that the decline is the result of a combination of changes in doctors' opinions, patient preferences, and reduced marketing of HRT by pharmaceutical companies.

Overall, there is much work to do to improve the health risks of older Californians since at least half do not eat enough fruits and vegetables and almost one-fifth are obese.

## Preventive Care and Use of Health Services

In general, rates of preventive services improved between 2001 and 2005. Particularly noteworthy is the improvement in breast cancer screening rates which improved by $5 \%$. As a result, the proportion of older women who did not have a mammogram in the past year fell, a trend that existed for almost all groups examined. Similarly, rates for men with a prostate-specific antigen (PSA) test also improved, as shown by the decrease in the proportion who never had a PSA test between 2001 and 2005 across almost all groups. Despite these improvements, over one-quarter of older Californians have still not had each of the recommended screenings, which leaves room for continued improvement.

While more older adults using preventive services is desirable, more older adults with emergency room (ER) visits and high numbers of doctor visits may not be desirable. Between 2001 and 2005 the proportion of older Californians who had one or more ER visits, as well as a high numbers of doctor visits (12 or more in the past year),

[^4]increased significantly among all demographic groups. Older adults with Medi-Cal were the most likely to have a high number of doctor visits, in part because of their high levels of chronic conditions. The increasing number of older adults with 12 or more doctor visits mirrors a national trend of increases in the number of physician visits by older adults. ${ }^{8}$ Nevertheless, a significant number of older adults continue to experience obstacles in getting needed care because the services are too far away, the costs are too high, or because of cultural and linguistic barriers. ${ }^{9}$

The highest ER rate was among African-American older adults where almost one-third reported an ER visit in 2005. The growing use of ERs is likely due to barriers faced in obtaining outpatient care combined with an increased demand for that care. Although older adults arrive at the ER in the most acute condition (one-quarter classified as in immediate or emergent need to be seen), ${ }^{10}$ research in California has also found that about two-fifths of all ER visits could be adequately handled in a doctor's office. When doctors' offices have insufficient same-day appointments and do not offer after-hours care, a substantial amount of treatment can shift to ERs. ${ }^{11}$ This may contribute to the increased use of ERs by older Californians. As health care costs continue to escalate and overcrowding of ERs grows, it is important to identify ways of providing adequate care for older adults in doctors' offices when appropriate.

[^5]Exhibit 2. Health Status, Health Risks and Use of Health Services by Selected Characteristics, Age 65 and Over, California 2001 and 2005

|  | Total |  | Male |  | Female |  | Latino |  | Asian American |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 |
| Health Status |  |  |  |  |  |  |  |  |  |  |
| Self-reported health status - fair or poor health | 30.9 | 31.7 | 30.1 | 30.1 | 31.6 | 33.0 | 48.9 | 45.5 | 34.9 | 45.0 |
| Arthritis, gout, lupus, fibromyalgia | 50.9 | 50.4 | 43.2 | 41.6 | 56.8 | 57.2 | 52.1 | 53.1 | 38.1 | 40.9 |
| Asthma - ever diagnosed | 10.3 | 11.2 | 9.8 | 9.5 | 10.7 | 12.6 | 9.5 | 10.4 | 14.1 | 9.7 |
| All cancers other than skin - ever diagnosed | 17.1 | 18.9 | 17.5 | 20.2 | 16.9 | 17.8 | 11.8 | 13.8 | 10.4 | 9.8 |
| Cancer of the skin - ever diagnosed | 10.1 | 11.8 | 13.0 | 13.3 | 7.9 | 10.6 | 1.4 | 3.2 | 0.9 | * |
| Diabetes - ever diagnosed | 15.1 | 17.5 | 17.7 | 19.8 | 13.1 | 15.6 | 25.9 | 30.1 | 15.2 | 18.4 |
| Diabetes - take insulin | 3.8 | 3.6 | 4.4 | 3.7 | 3.3 | 3.6 | 7.2 | 6.0 | 3.1 | 4.2 |
| Diabetes - take diabetic pills to lower blood sugar | 10.6 | 13.4 | 12.4 | 14.9 | 9.3 | 12.2 | 18.4 | 25.3 | 13.1 | 15.8 |
| Heart disease - ever diagnosed | 23.7 | 22.2 | 28.0 | 26.1 | 20.4 | 19.1 | 18.8 | 16.7 | 17.7 | 20.1 |
| High blood pressure - ever diagnosed | 53.6 | 60.3 | 51.7 | 58.0 | 54.9 | 62.1 | 54.2 | 63.8 | 55.8 | 60.3 |
| High cholesterol among individuals with hypertension or heart disease | 28.2 | 31.9 | 23.8 | 27.6 | 32.3 | 35.2 | 30.0 | 34.9 | 30.0 | 39.7 |
| Needed help for emotional/mental health problems | 7.0 | 9.2 | 6.0 | 7.2 | 7.8 | 10.8 | 9.1 | 12.0 | 3.8 | 11.6 |
| Mental distress** | - | 9.0 | - | 6.9 | - | 10.6 | - | 10.1 | - | 8.0 |
| Condition that limits basic activities (disability)** | - | 36.0 | - | 30.1 | - | 40.6 | - | 35.5 | - | 27.4 |
| Stroke** | - | 9.1 | - | 9.7 | - | 8.7 | - | 9.1 | - | 7.6 |


| Health Risk |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ate less than five fruits and vegetables/day | 53.2 | 52.6 | $\mathbf{4 8 . 4}$ | $\mathbf{4 3 . 7}$ | $\mathbf{5 6 . 9}$ | $\mathbf{5 9 . 4}$ | 57.5 | 54.3 | 59.4 | 56.9 |
| Food insecurity - unable to afford food | 15.9 | 17.4 | 18.0 | 17.4 | 14.9 | 17.3 | 24.9 | 19.9 | 20.9 | 27.9 |
| Obese: body mass index 30 or more | $\mathbf{1 6 . 5}$ | $\mathbf{1 7 . 9}$ | 16.2 | 16.7 | $\mathbf{1 6 . 7}$ | $\mathbf{1 8 . 9}$ | 25.1 | 29.4 | 6.0 | 6.9 |
| Receive hormone replacement therapy (women) | $\mathbf{3 1 . 8}$ | $\mathbf{1 1 . 6}$ | - | - | $\mathbf{3 1 . 8}$ | $\mathbf{1 1 . 6}$ | $\mathbf{2 3 . 6}$ | $\mathbf{7 . 9}$ | $\mathbf{2 6 . 5}$ | $\mathbf{5 . 0}$ |
| Sedentary (no physical activity)** | - | 17.3 | - | 14.3 | - | 19.6 | - | 15.5 | - | 12.4 |


| Preventive Health Services and Utilization |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No flu shot in past 12 months | 33.0 | 34.3 | 32.0 | 34.0 | 33.7 | 34.6 | 45.6 | 36.5 | 29.2 | 28.3 |
| No mammogram in past 12 months (women) | 36.1 | 31.0 | - | - | 36.1 | 31.0 | 43.2 | 27.7 | 44.4 | 38.0 |
| Never had colonoscopy | 38.2 | 29.3 | 31.3 | 26.3 | 43.5 | 31.6 | 49.6 | 36.1 | 50.4 | 34.3 |
| Never had prostate-specific antigen test (men) | 32.2 | 27.9 | 32.2 | 27.9 | - | - | 46.8 | 36.8 | 47.4 | 48.1 |
| Emergency room visit past year | 21.0 | 24.7 | 22.3 | 25.6 | 20.1 | 24.0 | 21.8 | 27.4 | 18.9 | 22.2 |
| 12 or more provider visits | 12.0 | 15.4 | 12.9 | 16.3 | 11.3 | 14.7 | 12.4 | 16.2 | 13.7 | 17.0 |

Notes: Bold/shaded estimates show a statistically significant trend between years. Underlined italic estimates are not reliable.

- Indicates data not collected
* Less than five respondents
** Data not available for 2001

Exhibit 2. Health Status, Health Risks and Use of Health Services by Selected Characteristics, Age 65 and Over, California 2001 and 2005 (continued)

|  | African American |  | Non-Latino White |  | Limited English |  | Proficient English |  | Below 200\% <br> Poverty Level |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 |
| Health Status |  |  |  |  |  |  |  |  |  |  |
| Self-reported health status - fair or poor health | 42.0 | 34.7 | 25.8 | 25.7 | 58.9 | 68.1 | 27.4 | 27.3 | 42.4 | 48.2 |
| Arthritis, gout, lupus, fibromyalgia | 58.3 | 53.1 | 51.8 | 51.1 | 50.3 | 49.1 | 51.0 | 50.6 | 53.1 | 53.2 |
| Asthma - ever diagnosed | 13.7 | 14.0 | 9.6 | 11.3 | 11.4 | 9.2 | 10.2 | 11.5 | 10.5 | 12.2 |
| All cancers other than skin - ever diagnosed | 15.0 | 20.5 | 19.5 | 21.7 | 7.8 | 19.9 | 18.4 | 10.6 | 14.4 | 16.4 |
| Cancer of the skin - ever diagnosed | * | * | 14.2 | 16.0 | 0.9 | 1.7 | 11.3 | 11.0 | 7.1 | 7.7 |
| Diabetes - ever diagnosed | 25.8 | 27.3 | 11.9 | 13.4 | 20.4 | 27.6 | 14.5 | 16.2 | 17.6 | 23.4 |
| Diabetes - take insulin | 9.9 | 5.8 | 2.7 | 2.8 | 5.4 | 4.4 | 3.5 | 3.5 | 4.6 | 4.6 |
| Diabetes - take diabetic pills to lower lower blood sugar | 17.8 | 19.2 | 7.9 | 9.6 | 18.0 | 24.4 | 9.7 | 12.0 | 12.6 | 18.0 |
| Heart disease - ever diagnosed | 18.9 | 18.8 | 25.8 | 24.0 | 20.8 | 15.2 | 24.1 | 23.0 | 23.5 | 22.2 |
| High blood pressure - ever diagnosed | 70.2 | 74.0 | 51.6 | 58.3 | 57.2 | 65.2 | 53.1 | 59.7 | 57.4 | 63.6 |
| High cholesterol among individuals with hypertension or heart disease | 26.3 | 35.0 | 28.4 | 29.3 | 31.3 | 42.3 | 28.4 | 30.6 | 31.9 | 34.7 |
| Needed help for emotional/mental health problems | 8.2 | 8.8 | 7.0 | 8.1 | 8.6 | 14.3 | 6.8 | 8.6 | 7.6 | 12.4 |
| Mental distress** | - | 15.3 | - | 8.3 | - | 9.6 | - | 8.9 | - | 12.3 |
| Condition that limits basic activities (disability)** | - | 47.8 | - | 36.5 | - | 33.4 | - | 36.3 | - | 42.6 |
| Stroke** | - | 10.0 | - | 9.2 | - | 7.8 | - | 9.3 | - | 11.1 |


| Health Risk |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
| Ate less than five fruits and vegetables/day | $\mathbf{6 6 . 8}$ | $\mathbf{5 9 . 5}$ | 50.3 | 50.8 | 58.0 | 58.6 | 52.6 | 51.8 | 58.9 | 58.5 |
| Food insecurity - unable to afford food | 29.3 | 27.2 | 8.9 | 8.6 | 27.3 | 26.3 | 12.8 | 14.0 | 15.9 | 17.4 |
| Obese: body mass index 30 or more | 28.0 | 27.3 | 15.4 | 16.4 | $\mathbf{1 7 . 2}$ | $\mathbf{2 5 . 8}$ | 16.4 | 17.0 | 19.5 | 21.6 |
| Receive hormone replacement therapy (women) | $\mathbf{2 0 . 0}$ | $\underline{\mathbf{5 . 1}}$ | $\mathbf{3 5 . 3}$ | $\mathbf{1 4 . 1}$ | $\mathbf{1 7 . 2}$ | $\mathbf{4 . 4}$ | $\mathbf{3 3 . 6}$ | $\mathbf{1 2 . 5}$ | $\mathbf{2 5 . 5}$ | $\mathbf{6 . 7}$ |
| Sedentary (no physical activity)** | - | 20.4 | - | 18.2 | - | 13.7 | - | 17.7 | - | 19.2 |


| Preventive Health Services and Utilization |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No flu shot in past 12 months | 49.0 | 47.0 | 29.7 | 33.7 | 38.8 | 31.6 | 32.2 | 34.6 | 35.9 | 37.2 |
| No mammogram in past 12 months (women) | 29.2 | 30.2 | 33.8 | 30.3 | 55.6 | 38.7 | 33.6 | 30.1 | 42.9 | 36.2 |
| Never had colonoscopy | 39.8 | 32.0 | 33.7 | 26.5 | 57.8 | 41.9 | 35.8 | 27.8 | 47.1 | 38.1 |
| Never had prostate-specific antigen test (men) | 35.2 | 23.3 | 26.5 | 22.4 | 60.0 | 53.7 | 28.8 | 24.8 | 47.3 | 45.9 |
| Emergency room visit past year | 21.0 | 32.0 | 21.2 | 23.9 | 20.4 | 25.4 | 21.1 | 24.6 | 20.4 | 25.4 |
| 12 or more provider visits | 14.8 | 13.4 | 11.4 | 15.1 | 16.1 | 22.1 | 11.5 | 14.6 | 13.9 | 17.6 |

[^6]- Indicates data not collected
* Less than five respondents
** Data not available for 2001

Exhibit 2. Health Status, Health Risks and Use of Health Services by Selected Characteristics, Age 65 and Over, California 2001 and 2005 (continued)

|  | 200\%+ Poverty |  | Medicare and Medi-Cal |  | Medicare and Other |  | Medicare Only |  | Other Only/ Uninsured |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 | 2001 | 2005 |
| Health Status |  |  |  |  |  |  |  |  |  |  |
| Self-reported health status - fair or poor health | 22.4 | 23.3 | 49.4 | 52.3 | 24.7 | 25.8 | 33.3 | 29.2 | 33.7 | 32.8 |
| Arthritis, gout, lupus, fibromyalgia | 49.3 | 49.0 | 54.5 | 52.9 | 51.6 | 51.4 | 42.1 | 36.7 | 41.3 | 45.2 |
| Asthma - ever diagnosed | 10.2 | 10.7 | 12.0 | 12.1 | 10.3 | 10.7 | 8.7 | 11.7 | 6.8 | 13.6 |
| All cancers other than skin - ever diagnosed | 19.2 | 20.1 | 13.6 | 17.0 | 19.4 | 20.0 | 12.5 | 17.6 | 8.9 | 13.8 |
| Cancer of the skin - ever diagnosed | 12.4 | 13.9 | 4.9 | 5.9 | 12.4 | 13.8 | 9.1 | 13.0 | 4.0 | 7.7 |
| Diabetes - ever diagnosed | 12.2 | 14.4 | 21.5 | 24.5 | 12.6 | 15.8 | 14.2 | 13.4 | 21.7 | 17.9 |
| Diabetes - take insulin | 3.2 | 3.2 | 6.9 | 5.4 | 2.8 | 3.4 | 2.7 | 2.6 | 4.8 | 2.0 |
| Diabetes - take diabetic pills to lower lower blood sugar | 9.1 | 10.9 | 14.9 | 19.8 | 8.7 | 11.7 | 10.4 | 10.2 | 17.2 | 14.2 |
| Heart disease - ever diagnosed | 23.8 | 22.2 | 25.6 | 24.1 | 24.0 | 22.7 | 19.6 | 17.0 | 17.9 | 15.0 |
| High blood pressure - ever diagnosed | 50.7 | 58.6 | 56.6 | 64.7 | 52.8 | 59.6 | 52.8 | 57.9 | 52.6 | 55.3 |
| High cholesterol among individuals with hypertension or heart disease | 26.1 | 30.4 | 32.6 | 40.6 | 27.5 | 30.2 | 30.7 | 28.6 | 26.7 | 22.7 |
| Needed help for emotional/mental health problems | 6.6 | 7.6 | 9.1 | 13.6 | 6.6 | 8.0 | 5.3 | 8.3 | 7.2 | 9.9 |
| Mental distress** | - | 7.3 | - | 12.7 | - | 8.0 | - | 12.0 | - | 4.4 |
| Condition that limits basic activities (disability)** | - | 32.6 | - | 42.9 | - | 34.8 | - | 29.9 | - | 32.8 |
| Stroke** | - | 8.1 | - | 12.7 | - | 8.1 | - | 9.0 | - | 9.3 |


| Health Risk |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ate less than five fruits and vegetables/day | 49.0 | 49.5 | 56.8 | 57.2 | 51.6 | 50.9 | 53.0 | 55.8 | 59.1 | 52.6 |
| Food insecurity - unable to afford food | - | - | 24.1 | 28.9 | 8.6 | 5.9 | 18.1 | 12.5 | 23.6 | 23.1 |
| Obese: body mass index 30 or more | 14.4 | 16.0 | 19.2 | 22.0 | 15.4 | 17.1 | 17.0 | 15.3 | 19.0 | 16.6 |
| Receive hormone replacement therapy (women) | 37.8 | 14.9 | 23.2 | 6.5 | 36.1 | 13.7 | 19.4 | 8.8 | 27.1 | 9.9 |
| Sedentary (no physical activity)** | - | 16.3 | - | 18.9 | - | 16.6 | - | 16.5 | - | 20.3 |


| Preventive Health Services and Utilization |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No flu shot in past 12 months | 30.8 | 32.8 | 37.2 | 34.8 | 29.2 | 32.7 | 46.7 | 44.9 | 45.5 | 39.3 |
| No mammogram in past 12 months (women) | 29.4 | 27.6 | 43.1 | 34.6 | 31.4 | 28.3 | 52.1 | 41.0 | 47.9 | 39.6 |
| Never had colonoscopy | 31.7 | 24.7 | 48.0 | 36.2 | 32.5 | 24.9 | 52.7 | 42.9 | 53.3 | 42.2 |
| Never had prostate-specific antigen test (men) | 24.6 | 21.3 | 49.0 | 46.5 | 24.9 | 21.4 | 41.3 | 35.2 | 48.5 | 36.6 |
| Emergency room visit past year | 20.9 | 23.8 | 23.9 | 29.4 | 20.8 | 24.1 | 17.6 | 20.1 | 17.3 | 21.1 |
| 12 or more provider visits | 10.6 | 14.2 | 18.6 | 22.4 | 10.5 | 14.2 | 8.1 | 11.5 | 9.9 | 9.5 |

[^7]- Indicates data not collected
* Less than five respondents
** Data not available for 2001



# Changes in Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2001 and 2005 

his section provides an overview of selected indicators of health status, health risk, preventive care and health services use by older people in California at the county level for 2001 and 2005. The indicators shown are those with statistically significant changes between the years in many regions and counties (Exhibit 3). Data for only 2005 are shown for indicators with few regional or country changes in Exhibit 5.

## Demographics

Counties and sub-county planning areas varied widely in the proportion of their populations that were age 65 and over in 2005 —ranging from $5.7 \%$ to $17.2 \%$. Counties with the highest proportion of older adults were primarily in the Sierras and far Northern California. The largest numbers of people age 65 and over are in the large counties of Los Angeles $(998,000)$ and San Diego $(325,000)$. See also Map 1 which displays this data.

Half of the statewide increase in the number of older adults between 2001 and 2005 came from those living in Riverside, Los Angeles and Orange Counties. However, because the growth of the older population was slower than the total population growth, the proportion of Los Angeles County residents over age 65 actually fell slightly. Counties with the largest proportion of older adults (far north and Sierras) also generally saw the greatest growth in the proportion of older adults, although counties spread throughout the state saw their proportion of older adults grow.

## Health Status, Health Risks and Use of Health Services

The rates of diabetes and high blood pressure went up for older adults throughout the state. While there were only seven geographic areas with diabetes rates over $20 \%$ in 2001, the number had doubled to 14 areas by 2005. The
proportion of older adults with high blood pressure was higher in 2005 in every single region statewide when compared to the 2001 rates. In 2001 there were only five geographic areas where more than $60 \%$ of the older adults reported high blood pressure. By 2005 this quadrupled to 22 areas.

The use of hormone replacement therapy and the proportion of individuals who have never had a colonoscopy decreased significantly in every region and most counties. A number of counties had changes that were sizeable (for example, a 6\% decrease in "no colonoscopy" in Shasta County) but not statistically significant because of the relatively small sample sizes of older adults in the smaller counties.

Emergency room visits and 12 or more doctor visits increased in many regions. Several Southern California counties saw particularly large increases in both ER and doctor visits.

The San Joaquin Valley region is notable for its worsening health situation between 2001 and 2005. This region now has the highest rate of diabetes among the elderly statewide. The two counties in San Joaquin that had statistically significant increases in their older adult diabetes rates (Kern and Stanislaus) also had the highest rates statewide after Imperial County. The San Joaquin Valley region maintains the highest overall rate of reported heart disease. The breast cancer screening (mammogram) rate worsened in the San Joaquin region even though it was stable or improved in all other regions. While there are individual counties with similarly poor outcomes, such as Imperial County, no other region is lagging as much as the San Joaquin Valley region in these health status and preventive services indicators.

Exhibit 3. Changes in Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2001 and 2005


## Exhibit 3. Changes in Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2001 and 2005 (continued)

|  | Number ( N ) and Percent (\%) Population Age 65 and Over* |  |  |  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 |  | 2005 |  | Diabetes |  | High Blood Pressure |  |
|  | $\begin{gathered} \mathrm{N} \\ (\mathrm{x} 1000) \end{gathered}$ | \% | $\begin{gathered} \mathrm{N} \\ (\mathrm{x} 1000) \end{gathered}$ | \% | 2001 | 2005 | 2001 | 2005 |
| Central Coast Counties | 237 | 11.1 | 244 | 11.3 | 12.7 | 17.7 | 52.9 | 59.6 |
| Monterey | 41 | 9.9 | 41 | 9.9 | 14.6 | 16.6 | 54.0 | 63.0 |
| San Luis Obispo | 36 | 14.3 | 37 | 14.3 | 14.1 | 8.9 | 52.5 | 57.0 |
| Santa Barbara | 51 | 12.8 | 51 | 12.8 | 17.5 | 16.3 | 47.4 | 58.4 |
| Santa Cruz | 25 | 9.9 | 26 | 10.2 | 11.4 | 11.1 | 51.3 | 50.8 |
| Ventura | 79 | 10.3 | 85 | 10.7 | 8.4 | 25.2 | 56.5 | 62.3 |
|  |  |  |  |  |  |  |  |  |
| Los Angeles County | 944 | 9.8 | 998 | 9.8 | 16.5 | 16.3 | 54.4 | 58.7 |
| SPA 1: Antelope Valley | 28 | 9.3 | 18 | 5.7 | 23.5 | 15.2 | 55.3 | 59.1 |
| SPA 2: San Fernando | 206 | 10.1 | 193 | 9.2 | 14.5 | 14.9 | 47.7 | 51.8 |
| SPA 3: San Gabriel | 195 | 11.4 | 195 | 10.6 | 15.7 | 15.9 | 50.5 | 63.1 |
| SPA 4: Metro | 76 | 6.9 | 113 | 9.5 | 10.5 | 24.3 | 57.3 | 64.3 |
| SPA 5: West | 78 | 11.3 | 104 | 16.3 | 6.8 | $\underline{2.8}$ | 45.7 | 46.9 |
| SPA 6: South | 66 | 8.2 | 73 | 7.2 | 32.7 | 24.8 | 69.6 | 70.8 |
| SPA 7: East | 121 | 9.4 | 131 | 9.6 | 21.0 | 19.0 | 62.1 | 55.1 |
| SPA 8: South Bay | 172 | 10.7 | 158 | 9.9 | 16.1 | 15.9 | 58.2 | 63.1 |
|  |  |  |  |  |  |  |  |  |
| Other Southern California Counties | 973 | 10.5 | 1038 | 10.4 | 17.2 | 17.4 | 54.4 | 61.3 |
| Imperial | 15 | 10.2 | 16 | 10.3 | 30.4 | 34.9 | 61.6 | 57.1 |
| Orange | 290 | 10.0 | 316 | 10.6 | 14.5 | 16.4 | 53.1 | 64.6 |
| Riverside | 202 | 12.4 | 222 | 11.4 | 19.0 | 18.7 | 51.1 | 61.4 |
| San Bernardino | 150 | 8.5 | 159 | 8.1 | 23.9 | 20.1 | 57.6 | 56.7 |
| San Diego | 317 | 11.1 | 325 | 11.1 | 14.7 | 15.1 | 55.8 | 60.7 |

* Source: Population Division, U.S. Census Bureau, 2005 and CHIS 2005. bttp://www.census.gov/popest/counties/asrb/CC-EST2006-alldata.btml.

Notes: Bold and shaded estimates indicate a statistically significant trend. Underlined italic estimates are not reliable.

Exhibit 3. Changes in Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2001 and 2005 (continued)


| Sacramento Counties | $\mathbf{3 8 . 0}$ | $\mathbf{1 2 . 0}$ | $\mathbf{2 9 . 3}$ | $\mathbf{2 4 . 4}$ | 29.2 | 30.9 | 22.7 | 21.7 | 11.1 | 10.9 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| El Dorado | $\mathbf{3 1 . 9}$ | $\underline{9.5}$ | $\mathbf{3 5 . 6}$ | $\mathbf{1 8 . 2}$ | 29.5 | 31.2 | 16.6 | 21.7 | 5.8 | $\underline{10.1}$ |
| Placer | 32.6 | $\mathbf{1 6 . 1}$ | 25.9 | 28.3 | 27.7 | 25.8 | 20.0 | 26.3 | 4.4 | 13.7 |
| Sacramento | $\mathbf{4 0 . 7}$ | 10.0 | 28.1 | 26.0 | 28.3 | 31.5 | 25.5 | 20.6 | 14.0 | 10.7 |
| Yolo | 32.9 | $\underline{28.1}$ | $\mathbf{3 9 . 5}$ | $\mathbf{9 . 5}$ | 40.5 | 37.5 | 12.0 | 19.0 | 8.2 | $\underline{6.7}$ |


| San Joaquin Valley Counties | $\mathbf{3 4 . 5}$ | $\mathbf{1 3 . 4}$ | $\mathbf{3 9 . 0}$ | $\mathbf{3 2 . 2}$ | $\mathbf{3 5 . 1}$ | $\mathbf{4 1 . 8}$ | 21.1 | 23.7 | 12.4 | 15.6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fresno | $\mathbf{4 2 . 5}$ | $\underline{12.6}$ | 32.5 | 29.8 | 31.5 | 30.1 | 16.8 | 25.2 | 9.9 | 16.6 |
| Kern | $\mathbf{3 5 . 4}$ | $\mathbf{1 6 . 9}$ | $\mathbf{4 0 . 0}$ | $\mathbf{2 8 . 6}$ | 34.9 | 47.3 | 25.0 | 23.7 | 11.5 | 15.6 |
| Kings | $\mathbf{3 3 . 3}$ | $\underline{\mathbf{1 2 . 1}}$ | $\mathbf{5 4 . 1}$ | $\mathbf{3 8 . 1}$ | 27.0 | 39.3 | $\mathbf{2 0 . 2}$ | $\mathbf{4 1 . 7}$ | 12.5 | $\underline{9.2}$ |
| Madera | $\mathbf{3 9 . 3}$ | $\underline{9.3}$ | 36.4 | 29.4 | 37.2 | 45.6 | 18.3 | 25.1 | 13.7 | 20.0 |
| Merced | 28.8 | 19.7 | 38.2 | 38.5 | 24.6 | 25.3 | 22.5 | 25.2 | 13.3 | 16.1 |
| San Joaquin | 35.2 | $\star$ | 41.7 | 38.3 | 31.3 | 45.8 | 20.8 | 14.6 | 16.0 | $\underline{12.0}$ |
| Stanislaus | 24.5 | $\mathbf{1 4 . 2}$ | $\mathbf{3 9 . 8}$ | $\mathbf{2 8 . 8}$ | 46.5 | 49.1 | 22.9 | 26.5 | 7.7 | 11.2 |
| Tulare | $\mathbf{2 6 . 7}$ | $\mathbf{1 1 . 8}$ | 44.0 | 36.0 | 43.6 | 43.1 | 22.6 | 24.9 | 19.0 | 24.5 |

Exhibit 3. Changes in Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2001 and 2005 (continued)


[^8]

## Geriatric Health Indicators by County, Age 65 and Over, California 2003

wo geriatric problems-multiple falls and urinary incontinence-can provide substantial challenges to the ability of older adults to continue living independently and have a major impact on their quality of life. ${ }^{12}$ Data for 2003 are presented here because the questions were not asked in the 2005 California Health Interview Survey (Exhibit 4).

The percentage of older adults who fell to the ground more than once in the past 12 months had a wide variation. Four counties had rates under $10 \%$, including $7.4 \%$ in Santa Clara County, and four had rates over $20 \%$, including $26.3 \%$ in Imperial County. There is no clear geographic pattern in high rates of falls, with some counties in every region having rates above the state average. Although we only present data on all older adults in this report, an earlier report using this data at the statewide level examined the characteristics of those most likely to fall and found that Latino and American-Indian older adults had higher rates of falls than average, along with those with lower incomes and the oldest ages. ${ }^{13}$

The percentage of individuals with urinary incontinence in the past 30 days ranged from $11.8 \%$ in Ventura County to $29.7 \%$ in Del Norte/Humboldt Counties. In six geographic areas the rate was over $25 \%$. The rate of incontinence is much higher for older women than men. While the statewide average is $20.7 \%$, the statewide incontinence rate for older women is $25.4 \%$ and for men is $14.5 \%$ (data not shown in exhibit).

Ventura County had relatively low rates for both falls and incontinence compared to other counties. In contrast, Imperial County had higher rates for both indicators than most counties.

[^9]Exhibit 4. Geriatric Health Indicators by County, Age 65 and Over, California 2003

|  | Fell to the Ground More Than Once in Past 12 Months | Incontinence Within Past 30 Days |
| :---: | :---: | :---: |
| All California | 11.9 | 20.7 |
| Northern and Sierra Counties | 13.2 | 22.5 |
| Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne | 10.4 | 20.2 |
| Butte | 12.2 | 25.1 |
| Colusa, Glenn, Tehama | 7.9 | 26.5 |
| Del Norte, Humboldt | 15.9 | 29.7 |
| Lake, Mendocino | 10.5 | 15.5 |
| Lassen, Modoc, Siskiyou, Trinity | 20.7 | 22.4 |
| Nevada, Plumas, Sierra | 11.3 | 17.1 |
| Shasta | 17.7 | 24.1 |
| Sutter, Yuba | 14.2 | 23.8 |
|  |  |  |
| Greater Bay Area Counties | 10.7 | 18.7 |
| Alameda | 10.3 | 21.2 |
| Contra Costa | 14.0 | 19.4 |
| Marin | 10.3 | 15.5 |
| Napa | 13.3 | 16.7 |
| San Francisco | 10.7 | 14.2 |
| San Mateo | 6.6 | 19.8 |
| Santa Clara | 7.4 | 17.7 |
| Solano | 17.4 | 20.6 |
| Sonoma | 16.0 | 20.9 |
|  |  |  |
| Sacramento Counties | 11.0 | 22.4 |
| El Dorado | 11.7 | 16.8 |
| Placer | 10.3 | 24.5 |
| Sacramento | 10.5 | 22.6 |
| Yolo | 16.3 | 22.9 |
|  |  |  |
| San Joaquin Valley Counties | 15.3 | 21.9 |
| Fresno | 13.9 | 19.7 |
| Kern | 10.1 | 17.6 |
| Kings | 9.7 | 23.8 |
| Madera | 15.6 | 29.7 |
| Merced | 21.8 | 18.1 |
| San Joaquin | 15.7 | 22.9 |
| Stanislaus | 18.3 | 28.8 |
| Tulare | 22.8 | 22.8 |

## Exhibit 4. Geriatric Health Indicators by County, Age 65 and Over, California 2003 (continued)

|  | Fell to the Ground More Than Once in Past 12 Months | Incontinence Within Past 30 Days |
| :---: | :---: | :---: |
| Central Coast Counties | 11.8 | 17.4 |
| Monterey | 15.9 | 21.7 |
| San Benito | * | * |
| San Luis Obispo | 11.0 | 18.0 |
| Santa Barbara | 14.8 | 21.8 |
| Santa Cruz | 11.4 | 18.9 |
| Ventura | 8.2 | 11.8 |
|  |  |  |
| Los Angeles County | 11.9 | 20.3 |
| SPA 1: Antelope Valley | 11.2 | 20.2 |
| SPA 2: San Fernando | 10.9 | 17.2 |
| SPA 3: San Gabriel | 12.3 | 19.6 |
| SPA 4: Metro | 10.9 | 23.5 |
| SPA 5: West | 13.2 | 15.3 |
| SPA 6: South | 10.7 | 24.4 |
| SPA 7: East | 15.3 | 27.2 |
| SPA 8: South Bay | 11.0 | 20.0 |
|  |  |  |
| Other Southern California Counties | 11.6 | 22.3 |
| Imperial | 26.3 | 28.4 |
| Orange | 10.1 | 23.5 |
| Riverside | 13.5 | 21.5 |
| San Bernardino | 8.5 | 21.3 |
| San Diego | 12.4 | 21.8 |

Note: Underlined italic estimates are not reliable.
*Less than five observations


## Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005

his section provides an overview of key findings on the health status, risks and health services use of older people in California by county in 2005. These are indicators where there were few statistically significant changes at the county level between 2001 and 2005, so only the 2005 data are presented (Exhibit 5).

Self-reported health status is the most commonly used global measure of health status. It is highly correlated with illness and disability, as well as being a good predictor of mortality. ${ }^{14}$ The proportion of older Californians reporting fair or poor health status varies dramatically by county, from a high of $60 \%$ in Imperial County to a low of $14.5 \%$ in San Luis Obispo County. Twenty-one geographic areas had rates above the statewide average of $31.7 \%$. See Map 2 to see this statewide pattern.

The San Joaquin Valley counties consistently had the worst rates of indicators of health status and health risks compared to the other regions in the state. These indicators included fair/poor health status, arthritis, stroke, heart disease, frequent mental distress, conditions that limit basic activities, consuming less than five fruits or vegetables per day, food insecurity, obesity and sedentary lifestyle. Four out of the five counties with the highest rates of obesity (Kern, Stanislaus, Merced and Kings counties) were from the San Joaquin Valley. This is consistent with the county pattern discussed for the trend data in Exhibit 3.

Several counties in the Bay Area had low rates of many health status and health risk indicators, and favorable rates of preventive health services. Sonoma County in particular had among the lowest rates in the state for a number of indicators. Several Central Coast counties had particularly low rates of disability (conditions that limit basic activities).

[^10]
## Exhibit 5. Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005

|  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair/Poor Health Status | Arthritis ${ }^{\dagger}$ | Asthma | Cancer | Stroke | High Cholesterol |
| All California | 31.7 | 50.4 | 11.2 | 18.9 | 9.1 | 31.9 |
| Northern and Sierra Counties | 28.4 | 51.2 | 13.5 | 23.9 | 9.1 | 24.4 |
| Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne | 31.5 | 43.4 | 10.8 | 24.9 | 11.6 | 15.8 |
| Butte | 25.3 | 45.5 | 12.2 | 26.5 | 7.5 | 23.9 |
| Colusa, Glenn, Tehama | 31.8 | 55.3 | 23.7 | 13.7 | 6.7 | 27.9 |
| Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity | 32.4 | 55.7 | 19.7 | 29.9 | 3.4 | 21.3 |
| Humboldt | 23.1 | 55.0 | 15.8 | 18.6 | 9.7 | 32.2 |
| Lake | 28.2 | 56.1 | 10.6 | 18.3 | 8.7 | 28.9 |
| Mendocino | 16.9 | 42.7 | 10.4 | 15.1 | 4.8 | 24.1 |
| Nevada | 25.3 | 60.5 | 8.1 | 20.4 | 13.5 | 27.7 |
| Shasta | 29.3 | 53.1 | 9.4 | 32.3 | 12.1 | 24.2 |
| Sutter | 30.1 | 48.0 | 16.1 | 16.8 | 15.9 | 29.6 |
| Yuba | 35.1 | 61.8 | 17.9 | 18.8 | * | 32.8 |
|  |  |  |  |  |  |  |
| Greater Bay Area Counties | 29.9 | 45.4 | 11.9 | 17.5 | 9.3 | 28.9 |
| Alameda | 30.4 | 51.2 | 8.1 | 16.6 | 8.9 | 37.1 |
| Contra Costa | 33.4 | 47.6 | 16.9 | 25.3 | 12.1 | 30.2 |
| Marin | 19.4 | 45.7 | 10.1 | 22.9 | 9.5 | 25.9 |
| Napa | 18.8 | 42.6 | 10.7 | 11.3 | 7.5 | 33.4 |
| San Francisco | 37.2 | 45.3 | 8.9 | 14.1 | 12.7 | 24.2 |
| San Mateo | 26.5 | 45.9 | 8.2 | 23.6 | 4.1 | 26.2 |
| Santa Clara | 31.4 | 39.6 | 16.4 | 13.8 | 10.6 | 24.4 |
| Solano | 25.5 | 49.5 | 13.0 | 11.2 | 7.9 | 30.4 |
| Sonoma | 22.2 | 40.4 | 10.0 | 15.9 | 4.1 | 30.3 |
|  |  |  |  |  |  |  |
| Sacramento Counties | 27.7 | 53.5 | 14.8 | 18.8 | 9.1 | 31.4 |
| El Dorado | 22.1 | 51.3 | 11.5 | 18.5 | 13.8 | 37.7 |
| Placer | 27.9 | 50.2 | 14.8 | 16.3 | 14.4 | 30.0 |
| Sacramento | 29.6 | 55.5 | 15.9 | 18.8 | 7.1 | 31.0 |
| Yolo | 18.8 | 47.2 | 9.9 | 24.9 | 6.1 | 28.5 |
|  |  |  |  |  |  |  |
| San Joaquin Valley Counties | 38.0 | 56.8 | 12.8 | 15.7 | 12.3 | 31.0 |
| Fresno | 39.3 | 51.5 | 12.4 | 12.0 | 9.7 | 23.6 |
| Kern | 38.0 | 66.8 | 12.5 | 13.0 | 13.9 | 33.9 |
| Kings | 41.6 | 45.7 | 14.0 | 21.7 | 15.1 | 19.7 |
| Madera | 42.7 | 50.0 | 18.4 | 18.0 | 9.8 | 29.0 |
| Merced | 31.1 | 52.7 | 20.1 | 18.3 | 7.9 | 22.3 |
| San Joaquin | 31.5 | 53.4 | 11.7 | 16.3 | 15.6 | 35.2 |
| Stanislaus | 39.7 | 55.2 | 10.3 | 24.1 | 13.6 | 27.2 |
| Tulare | 45.0 | 62.9 | 12.5 | 14.0 | 10.2 | 45.6 |

## Exhibit 5. Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005 (continued)

|  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair/Poor Health Status | Arthritis ${ }^{\dagger}$ | Asthma | Cancer | Stroke | High <br> Cholesterol |
| Central Coast Counties | 23.5 | 52.6 | 10.0 | 18.6 | 11.2 | 25.4 |
| Monterey | 22.2 | 58.0 | 11.2 | 15.1 | 8.7 | 18.9 |
| San Benito | 35.2 | 31.4 | * | 12.2 | 6.2 | 22.5 |
| San Luis Obispo | 14.5 | 53.1 | 11.4 | 19.7 | 6.8 | 23.6 |
| Santa Barbara | 25.2 | 45.6 | 13.0 | 21.6 | 13.3 | 23.8 |
| Santa Cruz | 23.3 | 45.6 | 14.0 | 22.4 | 11.1 | $\underline{23.5}$ |
| Ventura | 26.5 | 57.3 | 6.0 | 17.2 | 13.3 | 30.9 |
|  |  |  |  |  |  |  |
| Los Angeles County | 35.5 | 50.2 | 10.8 | 18.5 | 6.8 | 35.8 |
| SPA 1: Antelope Valley | 30.0 | 48.2 | 18.0 | 19.0 | 5.2 | 34.4 |
| SPA 2: San Fernando | 29.4 | 48.8 | 13.3 | 17.8 | 4.0 | 37.4 |
| SPA 3: San Gabriel | 30.8 | 51.0 | 7.9 | 16.0 | 6.9 | 37.0 |
| SPA 4: Metro | 50.7 | 48.1 | 15.7 | 11.3 | 11.7 | 37.5 |
| SPA 5: West | 31.2 | 51.5 | 8.6 | 27.4 | 7.8 | 30.2 |
| SPA 6: South | 45.2 | 49.3 | 7.5 | 23.0 | 7.1 | 51.9 |
| SPA 7: East | 37.6 | 51.7 | 11.3 | 16.7 | 7.4 | 22.6 |
| SPA 8: South Bay | 35.2 | 51.0 | 9.7 | 21.3 | 5.3 | 36.9 |
|  |  |  |  |  |  |  |
| Other Southern California Counties | 30.9 | 50.8 | 9.7 | 20.3 | 9.6 | 34.0 |
| Imperial | 59.7 | 34.7 | 9.5 | 15.4 | 7.6 | 30.4 |
| Orange | 28.6 | 46.3 | 8.2 | 20.8 | 8.4 | 32.3 |
| Riverside | 34.8 | 60.0 | 11.4 | 21.5 | 12.2 | 38.2 |
| San Bernardino | 35.9 | 48.6 | 9.5 | 18.1 | 11.4 | 27.5 |
|  |  |  |  |  |  |  |
| San Diego County | 25.6 | 48.8 | 9.5 | 20.1 | 7.5 | 34.7 |
| Region 1: North Coastal | 15.3 | 52.0 | 6.0 | 22.2 | 4.2 | 32.6 |
| Region 2: North Central | 25.0 | 47.7 | 11.4 | 26.5 | 7.3 | 36.6 |
| Region 3: Central | 32.2 | 38.1 | 12.9 | 18.8 | 11.4 | 32.0 |
| Region 4: South | $\underline{25.7}$ | 49.0 | 8.2 | 11.4 | * | 51.7 |
| Region 5: East | 34.6 | 54.2 | 12.3 | 16.2 | 13.4 | 38.7 |
| Region 6: North Inland | 23.1 | 48.7 | 6.0 | 21.3 | 4.8 | 17.5 |

Note: Underlined italic estimates are not reliable.
${ }^{\dagger}$ Includes arthritis, gout, lupus and fibromyalgia

* Less than five observations

Source: Population Division, U.S. Census Bureau, 2005 and California Health Interview Survey 2005.
bttp://www.census.gov/popest/counties/asrb/CC-EST2006-alldata.btml.

## Exhibit 5. Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005 (continued)

|  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Heart <br> Disease | Needed Emotional/ Mental Health Care | Frequent Mental Distress | Condition That Limits Basic Activities | Ate Less Than 5 Fruits or Vegetables |
| All California | 22.2 | 9.2 | 9.0 | 36.0 | 52.6 |
| Northern and Sierra Counties | 25.6 | 7.4 | 7.2 | 36.8 | 50.8 |
| Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne | 32.9 | 5.2 | 8.9 | 30.1 | 54.1 |
| Butte | 22.7 | 9.1 | 10.5 | 34.5 | 50.9 |
| Colusa, Glenn, Tehama | 25.5 | 4.6 | 4.3 | 39.3 | 47.2 |
| Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity | 21.8 | 9.8 | 5.2 | 40.1 | 43.4 |
| Humboldt | 22.4 | 7.0 | 9.5 | 38.9 | 51.6 |
| Lake | 26.8 | 9.7 | 10.9 | 36.2 | 52.9 |
| Mendocino | 23.7 | 9.1 | 5.7 | 31.6 | 51.5 |
| Nevada | 22.8 | 4.7 | 6.4 | 36.8 | 42.8 |
| Shasta | 26.4 | 8.2 | 5.8 | 41.3 | 53.7 |
| Sutter | 32.8 | 3.8 | 3.2 | 33.4 | 65.1 |
| Yuba | 19.1 | 8.8 | 3.7 | 51.2 | 47.6 |
|  |  |  |  |  |  |
| Greater Bay Area Counties | 20.4 | 9.8 | 7.8 | 35.6 | 50.4 |
| Alameda | 18.1 | 14.3 | 14.3 | 37.9 | 55.4 |
| Contra Costa | 29.4 | 9.9 | 7.3 | 42.4 | 48.4 |
| Marin | 23.1 | 8.5 | 6.8 | 28.2 | 43.9 |
| Napa | 23.1 | 13.3 | 7.4 | 36.6 | 44.5 |
| San Francisco | 18.7 | 12.5 | 8.5 | 37.8 | 62.9 |
| San Mateo | 18.7 | 7.1 | 4.9 | 31.0 | 52.3 |
| Santa Clara | 18.2 | 7.5 | 4.4 | 34.2 | 43.5 |
| Solano | 17.3 | 7.9 | 9.9 | 34.7 | 50.1 |
| Sonoma | 21.1 | 4.8 | 5.1 | 27.4 | 43.0 |
|  |  |  |  |  |  |
| Sacramento Counties | 18.7 | 7.2 | 9.8 | 38.4 | 51.7 |
| El Dorado | 29.2 | 4.3 | * | 39.7 | 44.2 |
| Placer | 13.6 | 11.6 | 9.5 | 34.2 | 45.1 |
| Sacramento | 17.9 | 6.1 | 10.7 | 40.2 | 55.7 |
| Yolo | 23.7 | 9.2 | 11.2 | 31.7 | 44.5 |
|  |  |  |  |  |  |
| San Joaquin Valley Counties | 26.4 | 9.4 | 11.5 | 40.6 | 56.7 |
| Fresno | 25.7 | 9.0 | 11.2 | 29.0 | 53.6 |
| Kern | 27.1 | 11.2 | 17.4 | 52.0 | 56.7 |
| Kings | 28.2 | 11.3 | 10.5 | 37.4 | 52.9 |
| Madera | 36.9 | 7.1 | 4.9 | 40.0 | 55.8 |
| Merced | 21.3 | 8.0 | 6.5 | 36.0 | 58.2 |
| San Joaquin | 26.6 | 9.4 | 7.1 | 42.6 | 52.3 |
| Stanislaus | 24.6 | 10.7 | 14.4 | 37.6 | 58.9 |
| Tulare | 26.0 | 5.8 | 8.1 | 45.6 | 69.0 |

## Exhibit 5. Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005 (continued)

|  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Heart Disease | Needed Emotional/ Mental Health Care | Frequent Mental Distress | Condition That Limits Basic Activities | Ate Less Than 5 Fruits or Vegetables |
| Central Coast Counties | 25.7 | 10.5 | 11.3 | 31.6 | 45.5 |
| Monterey | 25.5 | 11.3 | 7.1 | 25.9 | 39.6 |
| San Benito | 30.9 | 8.6 | 10.1 | 35.0 | 32.7 |
| San Luis Obispo | 22.2 | 7.9 | 9.3 | 21.3 | 48.0 |
| Santa Barbara | 22.2 | 7.4 | 6.0 | 34.3 | 40.0 |
| Santa Cruz | 30.7 | 21.9 | 14.4 | 24.4 | 44.4 |
| Ventura | 27.8 | 9.8 | 16.7 | 39.6 | 51.6 |
|  |  |  |  |  |  |
| Los Angeles County | 19.6 | 9.5 | 8.1 | 35.1 | 54.1 |
| SPA 1: Antelope Valley | 21.7 | 11.6 | 15.9 | 36.7 | 60.2 |
| SPA 2: San Fernando | 17.5 | 9.9 | 9.0 | 33.7 | 57.9 |
| SPA 3: San Gabriel | 21.3 | 11.8 | 9.1 | 33.1 | 48.3 |
| SPA 4: Metro | 23.4 | 10.2 | 9.0 | 41.8 | 61.0 |
| SPA 5: West | 20.5 | 6.3 | 3.9 | 32.7 | 44.2 |
| SPA 6: South | 14.0 | 6.7 | 8.0 | 39.0 | 54.7 |
| SPA 7: East | 18.2 | 5.2 | 4.6 | 34.4 | 54.5 |
| SPA 8: South Bay | 20.1 | 12.7 | 9.7 | 34.8 | 57.0 |
|  |  |  |  |  |  |
| Other Southern California Counties | 23.6 | 8.9 | 9.5 | 36.0 | 53.5 |
| Imperial | 22.0 | 14.0 | 12.8 | 41.5 | 50.4 |
| Orange | 17.5 | 9.4 | 7.2 | 32.8 | 51.5 |
| Riverside | 30.3 | 9.2 | 13.8 | 43.3 | 57.0 |
| San Bernardino | 27.9 | 9.5 | 10.1 | 35.8 | 51.9 |
|  |  |  |  |  |  |
| San Diego County | 21.3 | 7.6 | 7.3 | 32.4 | 53.3 |
| Region 1: North Coastal | 16.8 | 6.0 | 5.9 | 28.3 | 51.1 |
| Region 2: North Central | 24.5 | 11.5 | 12.4 | 34.6 | 51.0 |
| Region 3: Central | 24.2 | 15.0 | 6.2 | 40.1 | 52.0 |
| Region 4: South | 11.3 | * | * | 30.5 | 65.1 |
| Region 5: East | 24.5 | 5.8 | 8.3 | 30.7 | 63.0 |
| Region 6: North Inland | 24.3 | 5.5 | 6.3 | 31.7 | 38.8 |

[^11]Source: Population Division, U.S. Census Bureau, 2005 and California Health Interview Survey 2005. bttp://www.census.gov/popest/counties/asrb/CC-EST2006-alldata.btml.

## Exhibit 5. Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005 (continued)

|  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food Insecure ${ }^{\text {t }}$ | Obesity | Sedentary Lifestyle | No Flu Shot Past 12 Months | No PSA (Men) |
| All California | 18.7 | 17.9 | 17.3 | 34.3 | 27.9 |
| Northern and Sierra Counties | 10.0 | 18.9 | 21.0 | 38.3 | 26.9 |
| Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne | * | 14.2 | 19.4 | 25.9 | 15.0 |
| Butte | 4.9 | 15.9 | 22.8 | 40.9 | 43.8 |
| Colusa, Glenn, Tehama | 8.6 | 20.7 | 26.5 | 36.8 | 37.1 |
| Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity | 11.5 | 24.2 | 27.1 | 38.9 | 16.6 |
| Humboldt | 10.1 | 23.3 | 16.0 | 37.4 | 23.5 |
| Lake | 10.3 | 16.8 | 22.7 | 41.3 | 30.3 |
| Mendocino | 7.5 | 15.1 | 11.9 | 38.7 | * |
| Nevada | 9.0 | 14.0 | 17.2 | 46.5 | 28.7 |
| Shasta | 13.3 | 19.0 | 19.8 | 45.2 | 24.5 |
| Sutter | 18.9 | 23.9 | 20.3 | 35.0 | 36.1 |
| Yuba | * | 37.1 | 24.2 | 35.2 | 20.6 |
|  |  |  |  |  |  |
| Greater Bay Area Counties | 18.7 | 15.9 | 16.5 | 30.5 | 26.8 |
| Alameda | 20.6 | 15.5 | 10.3 | 36.8 | 35.1 |
| Contra Costa | 31.7 | 20.9 | 27.0 | 27.8 | 15.4 |
| Marin | 6.6 | 9.8 | 13.9 | 31.6 | 16.2 |
| Napa | $\underline{24.7}$ | 17.2 | 13.8 | 38.9 | 42.8 |
| San Francisco | 21.0 | 16.3 | 19.8 | 30.8 | 34.9 |
| San Mateo | * | 13.3 | 15.7 | 30.8 | 23.1 |
| Santa Clara | 16.8 | 14.0 | 15.3 | 24.6 | 26.7 |
| Solano | 20.7 | 19.8 | 15.8 | 29.2 | 24.8 |
| Sonoma | 8.8 | 16.7 | 13.2 | 34.7 | 23.1 |
|  |  |  |  |  |  |
| Sacramento Counties | 15.4 | 20.2 | 18.4 | 33.7 | 24.1 |
| El Dorado | 11.3 | 22.5 | 22.2 | 29.6 | 18.2 |
| Placer | 11.4 | 19.5 | 21.5 | 28.1 | 37.4 |
| Sacramento | 17.0 | 20.6 | 16.8 | 38.1 | 19.2 |
| Yolo | 10.5 | 15.8 | 18.2 | 16.0 | 29.4 |
|  |  |  |  |  |  |
| San Joaquin Valley Counties | 23.9 | 23.4 | 23.3 | 37.4 | 28.3 |
| Fresno | 26.0 | 21.0 | 10.9 | 33.7 | 17.6 |
| Kern | 20.4 | 25.6 | 33.2 | 44.8 | 33.3 |
| Kings | 9.8 | 34.8 | 24.8 | 30.9 | 28.5 |
| Madera | 15.9 | 22.5 | 25.5 | 26.6 | 32.4 |
| Merced | 22.5 | 28.1 | 19.8 | 37.8 | 34.0 |
| San Joaquin | 32.4 | 19.6 | 30.2 | 41.0 | 36.1 |
| Stanislaus | 20.1 | 27.2 | 24.7 | 38.6 | 23.6 |
| Tulare | 23.9 | 19.0 | 16.3 | 28.4 | 34.1 |

## Exhibit 5. Health Status, Health Risks and Use of Health Services by County, Age 65 and Over, California 2005 (continued)

|  | Percent of Persons Age 65 and Over with Characteristic |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food Insecure ${ }^{\text {t+ }}$ | Obesity | Sedentary Lifestyle | No Flu Shot Past 12 Months | No PSA (Men) |
| Central Coast Counties | 14.4 | 15.9 | 17.2 | 31.2 | 28.3 |
| Monterey | 15.7 | 23.4 | 15.7 | 21.8 | 14.1 |
| San Benito | 14.5 | 13.6 | 13.9 | 32.6 | $\underline{29.4}$ |
| San Luis Obispo | 8.7 | 14.8 | 9.2 | 29.7 | 29.8 |
| Santa Barbara | 14.7 | 11.3 | 11.3 | 24.7 | 25.5 |
| Santa Cruz | 16.0 | 13.0 | 16.7 | 27.3 | $\underline{28.6}$ |
| Ventura | 13.5 | 16.4 | 25.6 | 41.7 | 34.9 |
|  |  |  |  |  |  |
| Los Angeles County | 22.3 | 17.9 | 16.2 | 34.9 | 29.5 |
| SPA 1: Antelope Valley | 20.9 | 17.4 | 21.8 | 35.0 | 27.9 |
| SPA 2: San Fernando | 24.1 | 22.7 | 14.1 | 28.8 | 23.1 |
| SPA 3: San Gabriel | 22.0 | 15.8 | 12.3 | 35.4 | 30.4 |
| SPA 4: Metro | 26.2 | 19.3 | 22.7 | 38.8 | 38.3 |
| SPA 5: West | 15.2 | 7.7 | 15.7 | 30.0 | 15.9 |
| SPA 6: South | 30.7 | 21.8 | 14.9 | 49.9 | 31.7 |
| SPA 7: East | 9.6 | 20.6 | 18.9 | 35.7 | 40.0 |
| SPA 8: South Bay | 25.1 | 16.6 | 16.6 | 34.9 | 29.1 |
|  |  |  |  |  |  |
| Other Southern California Counties | 15.6 | 17.4 | 16.0 | 35.4 | 27.8 |
| Imperial | 29.0 | 23.2 | 6.9 | 36.1 | 32.2 |
| Orange | 16.2 | 15.9 | 15.4 | 31.4 | 31.4 |
| Riverside | 16.1 | 17.5 | 20.6 | 39.6 | 20.8 |
| San Bernardino | 18.5 | 18.9 | 15.4 | 40.3 | 36.5 |
|  |  |  |  |  |  |
| San Diego County | 11.5 | 17.8 | 13.0 | 32.9 | 26.0 |
| Region 1: North Coastal | - | 13.6 | 11.3 | 35.1 | 19.4 |
| Region 2: North Central | - | 15.0 | 13.6 | 25.7 | 14.1 |
| Region 3: Central | - | 23.4 | 3.6 | 31.8 | 31.0 |
| Region 4: South | - | $\underline{21.0}$ | 9.1 | 41.2 | * |
| Region 5: East | - | 20.3 | 22.6 | 36.5 | 45.4 |
| Region 6: North Inland | - | 16.6 | 13.6 | 30.0 | 18.9 |

[^12]${ }^{\dagger}$ Food insecurity is only asked for those with incomes below $300 \%$ of poverty. Because of the small sample size, this estimate (only) combines data from the 2003 and 2005 California Health Interview Surveys. San Diego County regional data are not presented because subcounty data were not collected in 2003.

* Less than five observations



## Conclusion: Disparities Continue Among Older Californians

hen examining the health status, health risks and use of health services for different groups of older adults, it is apparent that significant disparities by gender, race/ethnicity, income and region of the state continued to exist in California in 2005.

Women continued to have higher rates than men of arthritis and disability with a gap of over $10 \%$ for each in 2005. Arthritis is a leading cause of disability; therefore, a portion of the gender difference in disability is likely due to women's substantially higher arthritis rates. And since older women in California are almost twice as likely as men to be living alone ( $43 \%$ versus $22 \%$ ), women face a disproportionate risk for losing their independence due to disability.

Race and ethnicity continue to be a source of disparities among older Californians. Older African Americans, in particular, have worse health, more health risks and fewer preventive health services than non-Latino whites. African Americans have higher rates than non-Latino whites for fair/poor self-reported health, asthma, high cholesterol, mental distress, emergency room visits and never having had a colonoscopy. In addition, substantial disparities exist between older Latinos and older non-Latino whites in self-reported health, diabetes, food insecurity, obesity, no colonoscopy and no PSA test. Asian-American elders have particularly high rates of poor reported health, food insecurity, no mammogram and no PSA test. Pervasive racial
and ethnic disparities have received much attention for the overall population, ${ }^{15}$ but much less attention has been given to the elderly population. Many of these chronic conditions involved are "ambulatory sensitive," meaning that appropriate outpatient care can reduce the rates of complications that result from these conditions. Diabetes, for example, if not properly managed can lead to blindness, amputations, heart and renal failure, and other circulatory problems. Good quality primary care and health education, however, can substantially reduce the complications of diabetes.

Income disparities are also common. Most striking is the consistent pattern of low-income older adults (under 200\% of the federal poverty line) having lower rates of all preventive services. This pattern is consistent with research that shows preventive care is less likely when people have limited discretionary resources. Even though almost all older adults have Medicare, copayments and deductibles-along with transportation and other costs-still create barriers to preventive care for low-income older adults.

Geographic disparities are most apparent in the San Joaquin (Central) Valley region of the state since many counties in that region have high rates of health problems, health risks and a lack of adequate preventive services among older adults. Some of the regional differences may be attributable to the high proportions of low-income and older Latino adults in the population, but the rates were usually higher than those of Los Angeles County, which also had a high proportion of low-income and older Latino adults.

This indicates the need to strengthen the public health infrastructure in the San Joaquin area to better prevent chronic conditions before residents of the region reach their older years, and to help them manage health conditions and health risks they will face in old age. ${ }^{16}$

These data demonstrate a persistent pattern of disparities among older Californians that requires targeted interventions. Older women would particularly benefit from additional attention to reducing disability and addressing long-term care options. ${ }^{17}$ African-American and Latino elders would benefit from increased attention to diabetes prevention and improving access to health care. Low-income older adults in California would benefit from raising current eligibility limits for Medi-Cal and other health care assistance programs which fail to cover all older Californians who are struggling to make ends meet. ${ }^{18}$ And all older adults in the state, but especially in the San Joaquin Valley, would have a healthier old age if the public health system were strengthened to improve disease prevention and chronic disease management. It is essential that we begin to make these improvements in the programs and services that will improve healthy aging so that we are ready for the Baby Boom generation when they double the number of older adults in California.

16 Capitman JA, Riordan DG and Paul CM. Growing a Healthier San Joaquin Valley: Recommendations for Improving the Public Health and Healthcare. Fresno, CA: Central Valley Health Policy Institute, 2007.
bttp://www.csufresno.edul/cchbs/documents/CVHPI_recomend0107.pdf.
17 For a full discussion of the health issues facing older women, see Estes CL, Goldberg S and Fineman N. Women, Health and Aging: Building a Statewide Movement. Los Angeles: The California Endowment, 2007.
bttp://www.calendow.org/uploadedFiles/women_bealth_aging.pdf.
18 Wallace SP and Molina CL. Federal Poverty Guideline Underestimates Costs of Living for Older Persons in California. Los Angeles, CA: UCLA Center for Health Policy Research. February 2008. bttp://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=247.

## Methodological Appendix

## Data

Data on health status, health risk, and preventive health services and utilization for individuals 65 years of age and older come from the 2001 and 2005 California Health Interview Surveys (CHIS 2001 and CHIS 2005). Data on geriatric conditions come from CHIS 2003. Data for the population of non-institutionalized older adults by county is from the 2005 U.S. Census American Community Survey.

## Demographic Variables

## Race/Ethnicity

The health tables follow the California Department of Finance definition of race/ethnicity which are: Latino (of any race), non-Latino Asian, non-Latino Native Hawaiian/Other Pacific Islander (NHOPI), non-Latino American Indian/Alaska Native (AI/AN), non-Latino African American, non-Latino white, non-Latino other, and non-Latino two or more races. Because of the small county-level sample sizes, health data on non-Latino NHOPI, non-Latino AI/AN, non-Latino other and two or more races are not presented in this report.

## Limited English

In CHIS 2001 and CHIS 2005, individuals were asked what language(s) they speak at home. If they answered a language other than English, they were asked if they could speak English "Very well, well, not well, or not at all." Those responding "Not well, or not at all" were classified as limited-English speakers.

## Under 200\% Federal Poverty Level

This is the family income relative to the federal poverty threshold. Poverty is based on the household income in the previous year in both CHIS 2001 and CHIS 2005. These individuals have less than twice the income of the poverty threshold (based on income and family size, and are
considered low-income.) In 2001, the federal poverty threshold for individuals 65 years of age and older was $\$ 8,494$ and in 2005, the threshold was $\$ 9,367$.

## Medicare Only (No Supplemental Coverage)

These respondents reported that they have only traditional fee-for-service Medicare, implying that they have to pay out-of-pocket for Medicare's copayments, deductibles and services not covered by the fee-for-service Medicare program.

## Medicare and Medi-Cal

Respondents were asked if they were currently covered by Medi-Cal and were asked separately if they were covered by Medicare. The Medi-Cal recipient column in the health exhibits includes all those who answered "yes" to the MediCal question. It is important to note that not all Medi-Cal recipients, however, have Medicare.

## Medicare and Other

Includes respondents with fee-for-service supplemental Medicare policies, as well as those with Medicare HMO coverage that offers supplemental benefits. Those with Medicare only, who are also in a managed-care program (who report that they are covered for prescriptions, have signed up with a primary care provider, and have to get referrals) are included in the Medicare and Other category.

## Health Variables

## Fair or Poor Health

This combines these two answers to the question, "In general, would you say your health is excellent, very good, good, fair or poor?"

## Arthritis

In CHIS 2001, respondents were asked if they were ever diagnosed with arthritis; whereas in 2005, respondents were asked about arthritis, gout, lupus or fibromyalgia.

## Cancer

In Exhibit 2, the first measure for cancer indicates all cancers except for skin and a second measure exclusively for skin cancer.

## High Cholesterol Among Individuals with Hypertension or Heart Disease

In CHIS 2001, only adults ever told by doctor that they have heart disease and/or high blood pressure, and ever had their blood cholesterol checked, were asked if they had high cholesterol. In CHIS 2005, all respondents were asked: "The last time your cholesterol was checked, did a doctor tell you your blood cholesterol was high?" In this report, 2005 data on high cholesterol are presented only for those also reporting heart disease or high blood pressure to be consistent with 2001 data.

## Food Insecurity

This measure provides information on whether a respondent is consistently unable to afford enough food and is only asked of adults whose income is less than $200 \%$ of the Federal Poverty Level. Data from CHIS 2003 and CHIS 2005 were combined in order to produce more stable estimates.

## Obese

A Body Mass Index (BMI) of 30 or more is considered obese. The BMI is calculated from: weight (lbs)/[height(in) $]^{2} \times 703$.

## Frequent Mental Distress

This measure looks at persons who reported that their mental health was not good for 14 or more of the preceding 30 days. A 14-day minimum period is used because physicians and researchers often use a similar period as a marker for clinical depression and anxiety disorders. This is the definition used by the Centers for Disease Control (CDC) in the Behavior Risk Factor Surveillance System (BRFSS).

## Variables Not Presented

The following variables were analyzed but not included in the table of trends because there were few significant changes from 2001 to 2005 at the county-level and/or the estimates were unstable: all cancers other than skin, arthritis, asthma, takes insulin for diabetes, takes diabetic pills, five servings of fruits and vegetables/day, food insecurity, poor/fair health status, heart disease, high cholesterol, flu shot, needed help for emotional/mental health problems, never had a prostatespecific antigen test (men), conditions that limit one or more basic activities and obesity.

## Trend Calculations

We used data from CHIS 2001 and CHIS 2005 to estimate changes in the means of select health status, risk, preventive health services and utilization measures, and tested the significance of the change between the two years using 90\% confidence intervals. See "CHIS 2005 Methodology Paper: Examining Trends and Averages Using Combined Cross-Sectional Survey Data from Multiple Years" bttp://chis.ucla.edu/pdf/chis_pooling_10302006.pdf Weights were applied to estimate the correct variances.

## Suppressed Data

When a cell has fewer than five respondents in it, no information is presented. In addition, when the coefficient of variation (i.e., the standard error divided by the mean) is greater than $30 \%$, we mark the estimate with an underline and italics to show that the point estimate is statistically unstable. An unstable estimate has not met the criteria for a minimum number of respondents needed, AND/OR has exceeded an acceptable value for coefficient of variance.

## Author Information

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[^0]:    1 See http://www.whi.org/findings/htleplusp_3yr.php.

[^1]:    2 Hamman RF, Wing RR, et al. Effect of Weight Loss with Lifestyle Intervention on Risk of Diabetes. Diabetes Care, 29: 2102-2107, 2006.

[^2]:    3 California Department of Finance, July 2007. www.dof.ca.gov/HTML/DEMOGRAP/Repors_Papers/Projections/P3/P3.asp.
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[^3]:    Note: Bold and shaded estimates indicate a statistically significant trend between years.
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[^6]:    Notes: Bold/shaded estimates show a statistically significant trend between years. Underlined italic estimates are not reliable.

[^7]:    Notes: Bold/shaded estimates show a statistically significant trend between years. Underlined italic estimates are not reliable.

[^8]:    Notes: Bold and shaded estimates indicate a statistically significant trend. Underlined italic estimates are not reliable.

    * Less than five observations

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[^11]:    Note: Underlined italic estimates are not reliable
    $\dagger$ Includes arthritis, gout, lupus and fibromyalgia

    * Less than five observations

[^12]:    Note: Underlined italic estimates are not reliable

