



BYBODOX PARADISE

**HIDDEN HEALTH INEQUITIES ON
CALIFORNIA'S CENTRAL COAST**

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FOREWORD



May 2006

Most of us have had the opportunity to enjoy the beauty and charm of California's Central Coast – Monterey Bay, Big Sur, Hearst Castle, and Santa Barbara. As we drive through the region on our excursions, we often fail to contemplate the lives of those who live and work there -- the farmworkers who toil in the year-round agricultural industry that provides fresh vegetables for the nation, the maids, cooks and dishwashers who make our vacations enjoyable, and the young families who struggle to afford the region's skyrocketing costs.

Paradox in Paradise examines the health of the people living in the Central Coast region – the increasingly diversified population and the challenged health delivery system. Importantly, this report provides data that examines particular at-risk populations and local communities that often get lost in the regional or county level data. What we find when we look beneath the patina of wealth and glamour is that many residents lack access to affordable health care and that communities lack resources to adequately address critical health issues such as obesity and dental care. The data in this report pinpoint the problems and communities in greatest need, giving us an ability to target resources to critical issues and locations.

At The California Endowment, we believe that local communities are at the center of the health system. Armed with data such as that contained in *Paradox in Paradise*, communities can advocate for themselves for increased resources, improved programs, and responsive health policies that address their issues. We are pleased to have sponsored *Paradox in Paradise* and we look forward to working with Central Coast communities in ensuring that there is access to affordable, quality health care and that the health status of all residents reaches its maximum potential.



Robert K. Ross, M.D.
President and CEO
The California Endowment



INTRODUCTION

California's Central Coast is well known for its natural beauty and coastal resorts. Millions of visitors come to the Central Coast every year to experience the Santa Cruz beaches, visit Monterey Bay, shop in Carmel and drive down the remote Big Sur coastline to the Hearst Castle. Or visitors head north from the Los Angeles area through Ventura and the Oxnard beaches to visit Santa Barbara and San Luis Obispo Counties for and their burgeoning wine industries. Throughout the State, the Central Coast is often perceived as an area of wealth and abundant resources, with few health needs.

However, paradoxes exist in the Central Coast. Behind the patina of affluence and luxury are real people and real health problems constrained by an inadequate healthcare delivery infrastructure. Interspersed among the more affluent residents are hidden populations of low wage service and agricultural workers who provide the food for the nation, lodging for the tourists and services for wealthier residents. These populations do not share equally in the region's abundance and have greater health needs, yet have inadequate access to health care.

The six counties of the Central Coast – Santa Cruz, Monterey, San Benito, San Luis Obispo, Santa Barbara and Ventura – have a complex mixture of communities, some with extraordinary wealth and some with extreme poverty. Demographic changes over the past 20 years have created an area with no majority ethnic population and where many households do not speak English at home. There are five-fold differences in the rate of women receiving late or no prenatal care, and seven-fold differences in births to teens between the Central Coast communities. Contrary to popular belief, obesity and physical inactivity abound and one-third of Central Coast children are overweight and at risk of obesity. There are fewer medical resources than more populated areas of the State and there are physician and dentist shortages in many communities. Also, major groups of residents – particularly the poor, Latino and immigrant populations – have disparate measures of health status and access to health care compared to the regional average.

This report documents the health conditions in the often ignored Central Coast region. *Paradox in Paradise* mirrors *Health in the Heartland: The Crisis Continues*, a 2004 report by Joel Diring, et al. on the health of the San Joaquin Valley, published by California State University, Fresno. *Paradox in Paradise* presents over 60 health variables comparing the Central Coast counties to each other, to California as a whole, and to the *Healthy People 2010*, where appropriate. The report draws upon the most recently available data from a wealth of national, state, and local sources. It makes extensive use of newly released data from the California Health Interview Survey (CHIS), and the 2004 American Community Survey conducted by the U.S. Census Bureau. The region has been divided into 28 community clusters allowing for sub-county-level analysis to get a fuller picture of the differences among Central Coast communities.

In addition to reporting on health data, *Paradox in Paradise* provides analysis of the key issues reflected in the data, and makes recommendations for improving the health of the region. This report is designed

to stimulate discussion among state and local policymakers and community leaders to improve the conditions in the varied Central Coast communities, provide the infrastructure necessary to serve the diverse population, and address the needs of the marginalized populations of predominantly immigrant farmworkers and low-wage working families.

Paradox in Paradise is divided into four major sections:

- I. A profile of the Central Coast – describing its people and its health system, including demographics, economic indicators, environmental issues, health services, health financing, and insurance coverage. At-risk populations – farmworkers, immigrant children, low-wage workers, and low-income elderly -- receive a special focus in this report.
 - II. An overview of the health of Central Coast residents, highlighting access to care, health status, diseases, maternal and infant health, and behavioral risks.
 - III. An analysis of the use of health and social services in the Central Coast, including care-seeking behavior, hospitalization rates, use of public health and nutrition programs, and cancer screening.
 - IV. A summary of key themes, recommendations and conclusions on the health issues facing the Central Coast.
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METHODOLOGY

Paradox in Paradise relies heavily upon the data sets and information used in a prior report, *Health in the Heartland: The Crisis Continues*, a review of health in the San Joaquin Valley. *Paradox in Paradise* report reviews the most recently available national, state, and regional data as of January 2006. The data for over 60 demographic, economic, and health related indicators for the Central Coast region come from secondary sources. Data variables were selected on the basis of reliability, availability across the region, and usefulness for understanding conditions on the local level. These variables help provide a succinct representation of health issues and health-related services in the six Central Coast counties of Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara and Ventura.

When possible and appropriate, multi-year data were collected to provide an opportunity to review trends. These data have been compiled from web-based and public data sets into tables and figures. These visual representations of the data allow not only for comparison between the six counties but additional analysis and comparison with figures for California as a whole and with published national health objectives. Additional data tables are available at www.diringerasociates.com.



Figure I: Community Clusters within the Central Coast Region, California

In addition, some data were available on a zip-code level, enabling a comparison between different communities within the region. This analysis allowed differences within a county to be depicted via maps, tables and figures, offering a chance to pinpoint specific health problems, their characteristics, and their prevalence within each of the cluster communities. The zip code level data have been aggregated into 28 community clusters composed of contiguous zip-codes. (Figure 1 and Table 1). These clusters are similar but not identical to the Medical Service Study Areas (MSSA) used by the Office of Statewide Health Planning and Development (OSHPD).

Table 1: Legend of Community Clusters

No.	County	Community Cluster	Zip Codes in Cluster
1	Santa Cruz County	South Santa Cruz County	95019, 95076
2	Santa Cruz County	Central Santa Cruz County	95003, 95010, 95066, 95073
3	Santa Cruz County	North Santa Cruz County	95005, 95006, 95007, 95017, 95018, 95041
4	Santa Cruz County	Santa Cruz Urban	95060, 95062, 95063, 95064, 95065
5	San Benito County	San Benito County	95023, 95024, 95043, 95045
6	Monterey County	South Salinas Valley	93426, 93450, 93928, 93930, 93932, 93954,
7	Monterey County	Monterey Peninsula/Big Sur	93920, 93921, 93923, 93924, 93940, 93950, 93953
8	Monterey County	North Salinas Valley	93925, 93926, 93927, 93960
9	Monterey County	North Monterey County	93907, 93908, 93933, 93955, 95004, 95012, 95039
10	Monterey County	Salinas Urban	93901, 93905, 93906, 93962
11	San Luis Obispo County	SLO Urban	93401, 93403, 93405, 3406
12	San Luis Obispo County	South SLO County	93420, 93424, 93433, 93444, 93445, 93449
13	San Luis Obispo County	North Coast SLO County	93402, 93428, 93430, 93435, 93442, 93452
14	San Luis Obispo County	North Central SLO County	93422, 93423, 93432, 93453, 93465
15	San Luis Obispo County	North SLO County	93446, 93447, 93451, 93461
16	Santa Barbara County	Santa Maria Valley	93254, 93429, 93434, 93454, 93455, 93458
17	Santa Barbara County	Lompoc Valley	93436, 93437
18	Santa Barbara County	Santa Ynez Valley	93427, 93440, 93441, 93460, 93463
19	Santa Barbara County	Goleta Valley	93117, 93118
20	Santa Barbara County	Montecito /Summerland /Carpinteria	93013, 93067, 93108
21	Santa Barbara County	Santa Barbara Urban	93101, 93103, 93105, 93109, 93110, 93111
22	Ventura County	Ventura Urban	93001, 93003, 93004
23	Ventura County	Ojai Valley	93022, 93023
24	Ventura County	Santa Clara Valley	93030, 93033, 93035, 93041
25	Ventura County	Greater Oxnard Plains	93015, 93040, 93060
26	Ventura County	East Ventura County	93021, 93063, 93065
27	Ventura County	Santa Rosa Valley	93010, 93011, 93012, 93066
28	Ventura County	Conejo Valley	91320, 91360, 91361, 91362, 91377

Zip code-based community clusters are large enough to provide reliable estimates of health indicators, but small enough to show differences between cluster communities. Also residents can more easily identify their communities from the zip codes. However, it should be remembered that the clusters compiled of these zip codes are artificial composites of geographically assigned postal codes, not true communities.

Data Sources

This report utilized U.S. Census data for the demographic and economic indicator sections of the document. In addition to the 1990 and 2000 decennial censuses, this report also used the 2004 American Community Survey (ACS) conducted by the Census Bureau. The ACS is a new nationwide survey intended to eliminate the need for the long form in the 2010 Census and collect information such as income, ethnicity, language preference, home value, and other important demographic data. The ACS began in 1996 and has expanded each subsequent year. The ACS differs slightly from the Census in that it only surveys non-institutionalized populations. Also, in 2004 the ACS did not survey San Benito County residents. Where appropriate, data from the 2000 Census are used for San Benito County, and is duly noted. Zip code level data were not available from the ACS.

The California Department of Health Services (DHS) *County Health Status Profiles* were used for several variables of disease, morbidity, and mortality. Where appropriate, the 2005 *County Health Status Profiles* data were compared with the 2002 *County Health Status Profiles* data to provide a four-year data trend.

The California Office of Statewide Health Planning and Development (OSHPD) data on hospital and clinic licensure provided information on California's licensed hospitals, long-term care facilities, and clinics. Unlike *Health in the Heartland*, detailed community level hospital discharge data were not available from OSHPD; only county level data were available.

The California Health Interview Survey (CHIS) is another major data source. CHIS is a state-wide survey conducted biennially, in 2001 and 2003, by the UCLA Center for Health Policy Research in conjunction with the State Department of Health Services and the Public Health Institute. It is a random-digit-dial telephone survey of over 40,000 households drawn from every county in California. The CHIS sample design is able to generate results for all Central Coast counties. The survey is conducted in six languages and was designed to be inclusive of the diversity found in the state. It provides data on variables such as physical and mental health status; prevalence and management of chronic conditions such as diabetes, asthma, cancer, and high blood pressure; nutrition, health insurance coverage and lack of coverage; access to prevention services; and eligibility for and participation in the Medi-Cal program. To increase the statistical reliability of the CHIS data in this report, results from the 2001 and 2003 survey have been combined where possible. For some variables, the questions were not asked in one of the years, and only one year's results are reported.

Healthy People 2010 is a set of national health objectives developed in 2000. Like its predecessors, *Healthy People 2010* was developed through a broad consultative process, based on scientific knowledge, and designed to measure programs over time. The *Healthy People 2010* national objectives are used as the standard against which the region can be measured. Background information on many of the data indicators in this report was obtained from the *Healthy People 2010* report.

Less extensively used data sources include, but are not limited to, the following: California Department of Pesticide Regulation; California Food Policy Advocates; California Managed Risk Medical Insurance

Board; Central Coast Regional Water Quality Control Board; Center for Medicare and Medicaid Services; Centers for Disease Control and Prevention; University of California, San Francisco, Center for Health Professions, and the Environmental Protection Agency.

An advisory committee composed of health experts and community representatives from each of the six counties was convened to assist in defining the community clusters, recommending data to be included, reviewing findings and making recommendations.

Data Limitations

The U.S. Census Bureau data are estimates derived from a sample of the population and are subject to both sampling and non-sampling errors. Sampling error in data arises from the selection of people and housing units included in the sample. Non-sampling error occurs as a result of errors that may take place during the data collection and processing stage.

The U.S. Census Bureau also conducts the American Community Survey (ACS). The ACS is designed to provide communities a look at how they are changing and is conducted annually. While the information collected is similar to the Census 2000 long form, there are differences in the sample population. The ACS data only covers households, not institutions, college dormitories or other group quarters as did the Census 2000. Also, the ACS is gradually expanding its geographic coverage. San Benito County was not part of the sample in 2004, and thus cannot be included when ACS 2004 data are presented.

The California Health Interview Survey (CHIS) is a random telephone survey and it is subject to similar error. Households without a telephone were not sampled for the CHIS. This could give rise to bias in the estimates considering that approximately 5 percent of households in California are without telephones. Nevertheless, recent information utilized by the CHIS showed that the health characteristics of those with and without telephones are not as different as they had been in the past. To mitigate the effects of sampling bias, CHIS researchers used special weighting procedures such as over-sampling small rural counties.

Nonetheless, sample sizes utilized by CHIS are often too small to allow for reliable estimates of data relating to particular sub-populations on the county level, and sometimes at the regional level. For example, in the Central Coast region, data related to the relatively small Asian-American and African-American populations are statistically unstable and few reliable conclusions can be drawn.

The *County Health Status Profiles* use both crude rates and age-adjusted rates in reporting public health and vital statistics. Crude rates are based on a three-year average of events and the overall state population. Age-adjusted rates are hypothetical rates that would exist if state and county populations were distributed by age in the same proportions as a standard U.S. population. One should also keep in mind that all vital statistic rates are subject to random variation; the smaller the occurrence of an event (e.g. infant deaths), the more likely it is that the variable being reported has random fluctuations.



PROFILE OF THE CENTRAL COAST – ITS PEOPLE AND ITS HEALTH SERVICES

A. DEMOGRAPHICS

The changing demographics of the Central Coast have enormous implications not only for the health of the population, but also the effective delivery of health services. The population is growing and diversifying. There is no longer a “majority” population and many residents do not speak English as their dominant language. The population is aging, with a continued decrease in the percentage of residents of working age.

There are many who are economically well off on the Central Coast. However, the rising costs of living - including skyrocketing housing costs - lead many to choose between housing, food and health. Poverty persists, particularly among children and families. Jobs are heavily concentrated in the service and agricultural sectors, industries that have lower wages and fewer benefits.

Regional level data, however, do not paint an entirely accurate picture of the Central Coast landscape as seen by families in individual communities. There are five-fold differences between communities in percent of families in poverty, more than ten-fold differences in percent of Latino residents, and eight-fold differences in percentage of adults lacking a high school education. Health programs need to be designed within the context of the Central Coast communities. Community-focused rather than county-focused approaches are needed to improve the health status of these communities.

Population Growth

The Central Coast is a fairly sparsely populated area encompassing 15,380 square miles and having a population of approximately 2.25 million persons in 2005. About one in sixteen Californians live in one of the Central Coast counties. (Figure 2).

The Central Coast is growing at a slower rate than the rest of California. The region is expected to see 10.8 percent growth in population from 2000 to 2010, bringing the population to 2.37 million persons. This will be approximately the same rate of growth seen from 1990-2000. San Benito County is expected to experience the largest rate of growth (14.9% from 2000 projected to 2010) and Santa Cruz the slowest (5.8%). California is expected to grow 13.7% from 2000-2010. (Figure 3).

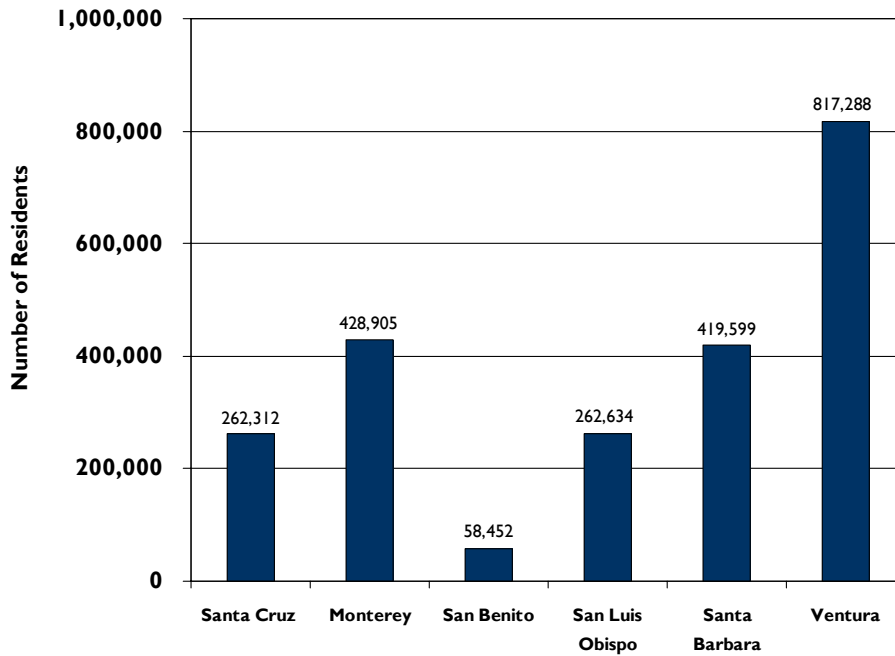


Figure 2: Projected Total Number of Residents, Central Coast Region, 2005
Source: CA Department of Finance, 2005

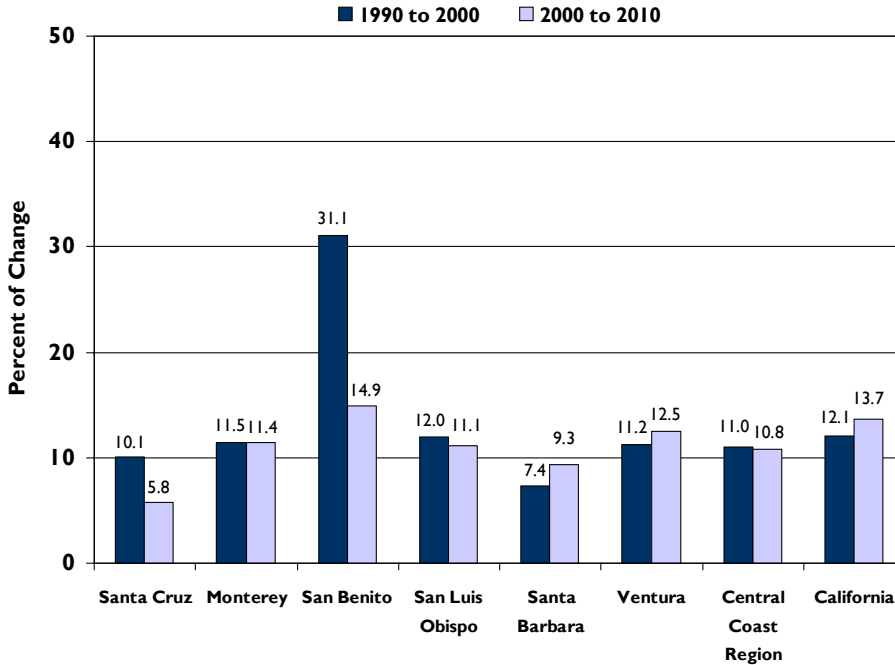


Figure 3: Projected Percent Change in Total Population, Central Coast Region, 1990-2010
Source: U.S. Census Bureau, 2005; CA Department of Finance, 2005

Age Profile

The distribution of ages in a population has important implications for economics, programs, and health status. For example, children and seniors generally have the greatest health care and health education needs. Children are not yet contributing to the economy, but resources need to be allocated for their public health and education. The elderly, on the other hand, have by and large completed their contributions to the economy and require community resources for health, retirement, and other living costs. Working-age adults are critically important to a region’s well-being because they are the primary income producers for both the young and the old. The baby boomers, aged 42–60, are aging. Many will soon be out of the workforce and require additional support services.

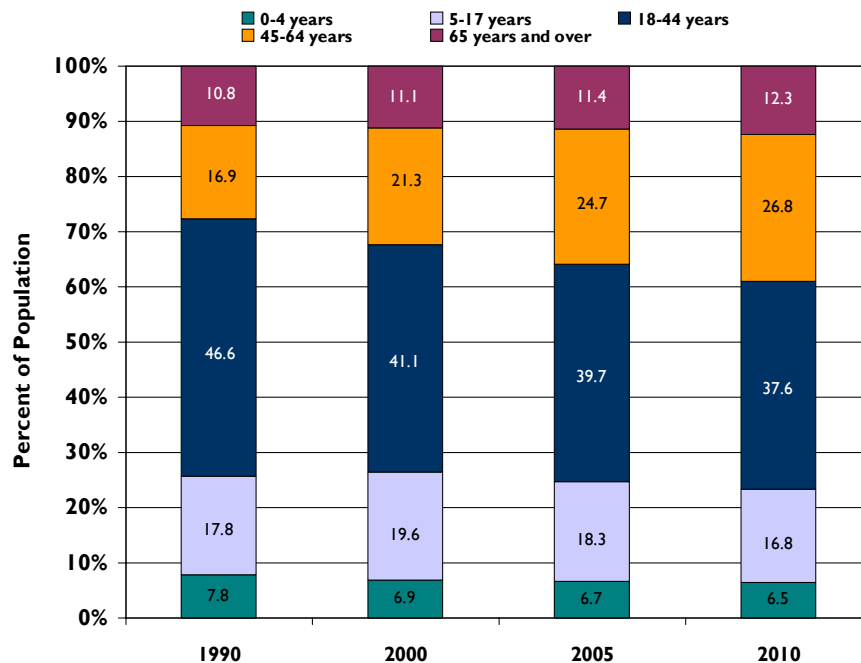


Figure 4: Projected Percentage of Population by Age Group, Central Coast Region, 1990-2010

Source: U.S. Census Bureau, 2005; California Department of Finance, 2005

The Central Coast has a slightly older population with fewer children and young adults than California as a whole. Regionally, 11.4 percent of residents were over age 65 in 2005, compared to 11.0 percent of Californians. In San Luis Obispo County, 15.1 percent of the population was over age 65, while in San Benito County only 8.3 percent were elderly (CA Department of Finance, 2005). (Figure 4).

At the other end of the age spectrum, 25.0 percent of Central Coast residents were under age 18 in 2005, down from 26.5 percent in 2000. California also experienced a decrease from 27.3 percent under age 18 in 2000 to 26.1 percent in 2005. The percentage of children and youth under age 18 ranged from 30.3 percent in San Benito County to 19.4 percent in San Luis Obispo County (CA Department of Finance, 2005). (Figure 4).

There were also fewer younger adults, aged 25-44 years, in the Central Coast than elsewhere in the state. Only 27.8 percent of the region’s population was aged 25-44, compared to 29.6 percent of California’s population. The young adult population dropped from 30.1 percent of the total population

in 2000 to 27.8 percent in 2005. Projections through 2010 show a continuing loss in the younger population and growth in the elderly population (CA Department of Finance, 2005). (Figure 4).

Ethnicity

While a varied and diverse population can be a great asset to a region, ethnic diversity means that health systems must respond to varied needs, languages and challenges posed by differing cultural attitudes and behaviors.

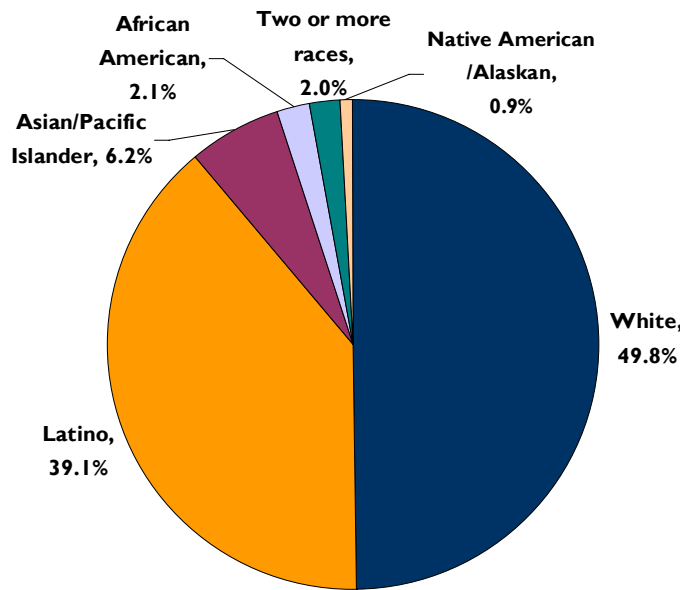


Figure 5: Projected Percentage of Population by Ethnicity, Central Coast Region, 2005
 Source: CA Department of Finance, 2005

As is California, the Central Coast is ethnically diverse, with no ethnic group constituting a majority of the population. In the Coastal region in 2005, 49.8 percent of the population was white, 39.1 percent Latino, 6.2 percent Asian/Pacific Islander, and 2.1 percent African American. Less than 1 percent of residents were Native American, while 1.9 percent were identified as having two or more races. (Figure 5). Ethnic distribution varied throughout the region. For instance, Monterey County’s residents were 51.2 percent Latino, while San Luis Obispo County’s residents were 18.4 percent Latino. Similarly, Ventura residents were 9.0 percent Asian/Pacific Islander, compared to 2.5 percent of residents were Asian/Pacific Islander in San Benito County (CA Department of Finance, 2005).

The Central Coast had approximately 39.1 percent (879,000) Latino residents in 2005, constituting a higher percentage of Latino residents than in California (35.9%) as a whole. Between 2000 and 2010 the percentage of Latino residents in the Central Coast is projected to increase from 33.7 percent of the population to 42.7 percent; in California, the percentage of Latino residents is projected to increase from 32.4 percent to 38.7 percent. During the same period, the white population in the Central Coast is projected to drop from 56.7 percent to 44.9 percent. (Figure 6).

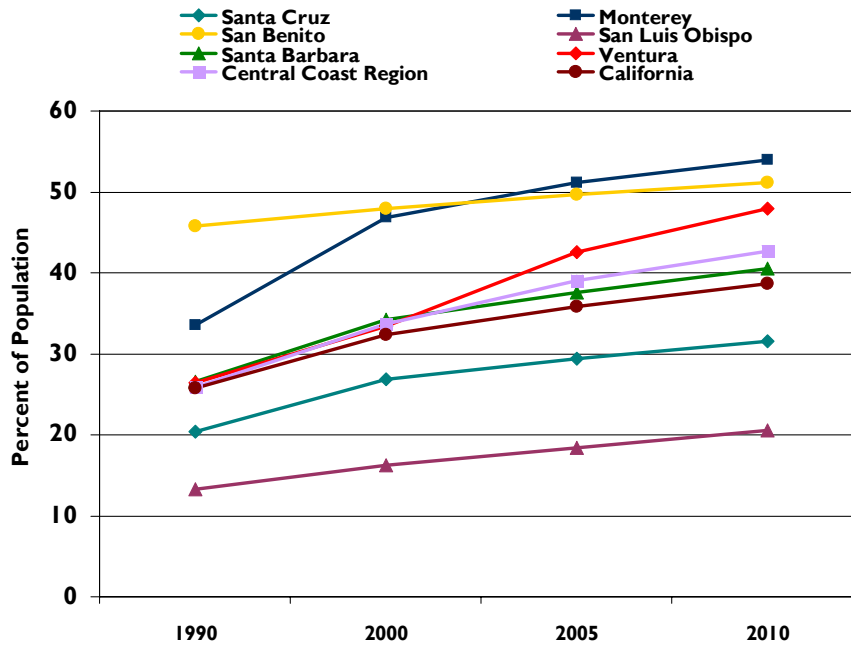


Figure 6: Projected Percentage of Population of Latino Ethnicity by Year, Central Coast Region, 1990-2010

Source: U.S. Census Bureau, 2005; CA Department of Finance, 2005

According to the U.S. Census conducted in 2000, the community clusters showed wide variations in the percentage of Latino residents. North Santa Cruz County had a population in 2000 that included 6.4 percent Latino residents, while North Salinas Valley community cluster had a population that included 72.4 percent Latino residents. (Table 2 and Table 3).

Table 2: The 10 Communities with the Lowest Percentage of Latino Residents, 2000

County	Community Cluster	% of Latino Residents
Santa Cruz	North Santa Cruz County	6.4
Monterey	Monterey Peninsula/Big Sur	7.5
Santa Cruz	Central Santa Cruz County	8.8
San Luis Obispo	North Central SLO County	10.2
San Luis Obispo	North Coastal SLO County	11.0
Ventura	Conejo Valley	11.6
San Luis Obispo	San Luis Obispo Urban	14.3
Ventura	Santa Rosa Valley	15.8
Ventura	North Ventura County	15.8
Santa Cruz	Santa Cruz Urban	17.2

Source: U.S. Census Bureau, 2000

Table 3: The 10 Communities with the Highest Percentage of Latino Residents, 2000

County	Community Cluster	% of Latino Residents
Monterey	North Salinas Valley	72.4
Ventura	Santa Clara Valley	67.5
Monterey	South Salinas Valley	64.6
Monterey	Salinas Urban	64.5
Ventura	Greater Oxnard Plains	62.6
Santa Barbara	Santa Maria Valley	49.0
San Benito	San Benito County	47.1
Monterey	North Coastal Monterey County	31.6
Santa Barbara	Santa Barbara Urban	31.1

Source: U.S. Census Bureau, 2000

Languages

A lack of proficiency in the English language affects a person's ability to discuss medical symptoms and treatments with a physician or nurse, to complete an insurance application, or to decipher a medical bill. Language problems affect insurance coverage, because those with limited English proficiency may also have limited employment opportunities and may work in jobs less likely to offer employment-based insurance (Ku, 2003).

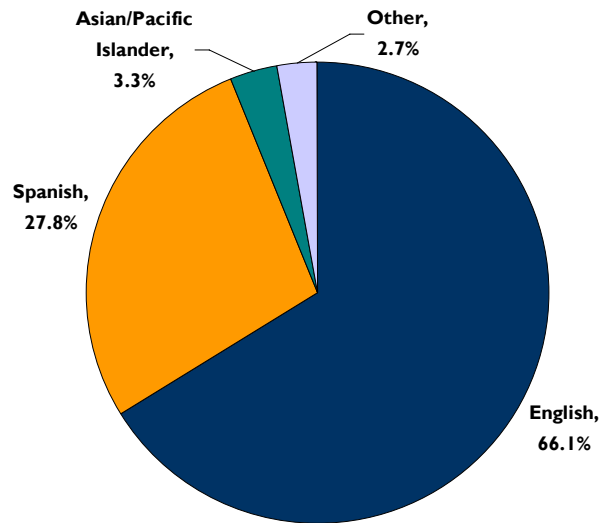


Figure 7: Percentage of Population, 5 Years and Over, by Dominant Household Language, Central Coast Region, 2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

English remains the dominant household language, yet the percentage of English speaking households has been decreasing since 1990. In 1990, 74.5 percent of Coast households reported that their household language was English, while by 2004, that number had dropped to 66.1 percent. (Figure 7). Similarly, in California as a whole, the percentage of English-speaking households dropped from 69.9 percent to 58.7 percent.

Comparatively, the percentage of Central Coast households who spoke Spanish as the dominant language rose from 16.7 percent in 1990 to 27.8 percent in 2004; ranging from a high of 43.9 percent in Monterey County to a low of 24.1 percent in Santa Cruz County. In California, the percentage of households that spoke Spanish rose from 17.3 percent to 27.6 percent. (Figure 8).

During the same time period, the percentage of Central Coast households that spoke an Asian or other language decreased slightly from 8.9 percent in 1990 to 6.0 percent in 2004. The percentage of households speaking an Asian or other language in California remained fairly constant at an average of 13.4 percent.

The percentage of Central Coast residents who do not speak English “well or at all” decreased from 16.8 percent in 2000 to 15.6 percent in 2004, with ranges from 27.8 percent in Monterey County to 5.6 percent in San Luis Obispo County. In California, the percentage of individuals who did not speak English “well or at all” remained constant at to 19.9 percent. (Figure 9).

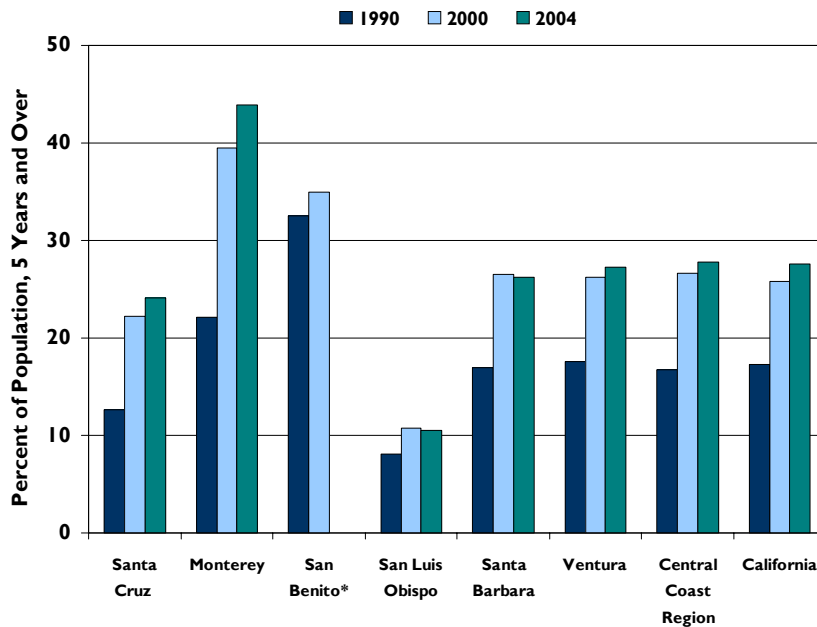


Figure 8: Percentage of Population, 5 Years and Over, with Spanish as the Dominant Household Language, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

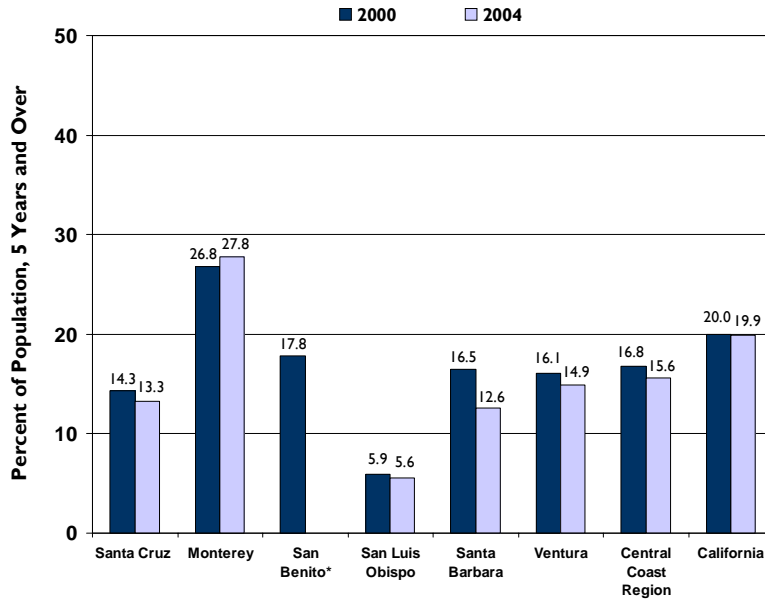


Figure 9: Percentage of Population, 5 Years and Over, Who Speak English Less Than 'Very Well', Central Coast Region, 2000-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

There was a wide variation between the cluster communities according to percentage of the population who do not speak English at home. In 2000, North Central San Luis Obispo County, had the lowest percentage of individuals over age 5, who spoke a language other than English at home (7.7%), while North Salinas Valley had the highest percentage of individuals over age 5 who did not speak English as the dominant language at home (66.9%). (Table 4 and Table 5).

Table 4: The 10 Communities with the Lowest Percentage of Population, 5 Years and Over, Who Do Not Speak English as the Dominant Language At Home, 2000

County	Community Cluster	% of Population who Do Not Speak English at Home
San Luis Obispo	North Central SLO County	7.7
Santa Cruz	North Santa Cruz County	8.9
San Luis Obispo	North Coastal SLO County	12.2
Santa Cruz	Central Santa Cruz County	12.2
San Luis Obispo	San Luis Obispo Urban	13.3
Ventura	North Ventura County	14.7
San Luis Obispo	South SLO County	18.2
Monterey	Monterey Peninsula/Big Sur	18.4
Ventura	Conejo Valley	18.7
Ventura	Santa Rosa Valley	19.8

Source: U.S. Census Bureau, 2000

Table 5: The 10 Communities with the Highest Percentage of Population, 5 Years and Over, Who Do Not Speak English as the Dominant Language At Home, 2000

County	Community Cluster	% of Population Who Do Not Speak English at Home
Monterey	North Salinas Valley	66.9
Monterey	Salinas Urban	60.3
Santa Cruz	South Santa Cruz County	60.2
Monterey	South Salinas Valley	59.3
Ventura	Greater Oxnard Plains	58.4
Ventura	Santa Clara Valley	54.5
Santa Barbara	Santa Maria Valley	42.2
San Benito	San Benito County	37.3
Monterey	North Coastal Monterey County	37.3
Santa Barbara	Santa Barbara Urban	32.3

Source: U.S. Census Bureau, 2000

Immigration

Immigration into an area can provide an economic stimulus through an increase in the size of the labor force, entrepreneurial energy, and connections with other markets. When examining health issues, immigrants often come to the United States healthier than the “native” population. However, acculturation frequently has a negative impact on health, because immigrants typically adopt poor American eating behaviors and other unhealthy behaviors. In addition, immigrants are often unfamiliar with the American health system and therefore may not understand or utilize it (McGlade, 2004).

Over one in five Central Coast residents (21.6%) was born outside the United States, compared to 26.8 percent in California. During the period from 1990 to 2004, the immigrant population in the Coast increased by 24.1 percent, from 16.4 percent in 1990 to 21.6 percent in 2004; the increase in California was 19.0 percent. Whereas one-third (33.0%) of Monterey County’s population were immigrants, only 9.5 percent of San Luis Obispo County’s population were born outside of the country. (Figure 10). The rates of growth in the immigrant population also varied. Between 1990 and 2004, Monterey County experienced a 34.5 percent growth in its immigrant population, while Santa Cruz’s rate of growth in immigrants was 14.6 percent. (Figure 11).

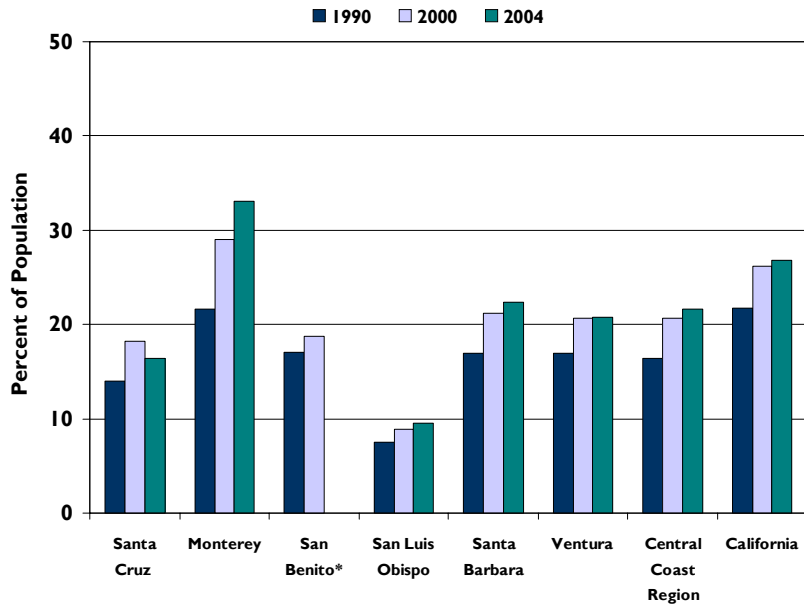


Figure 10: Percentage of Population Born Outside of the United States, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005
 *2004 data does not include San Benito County.

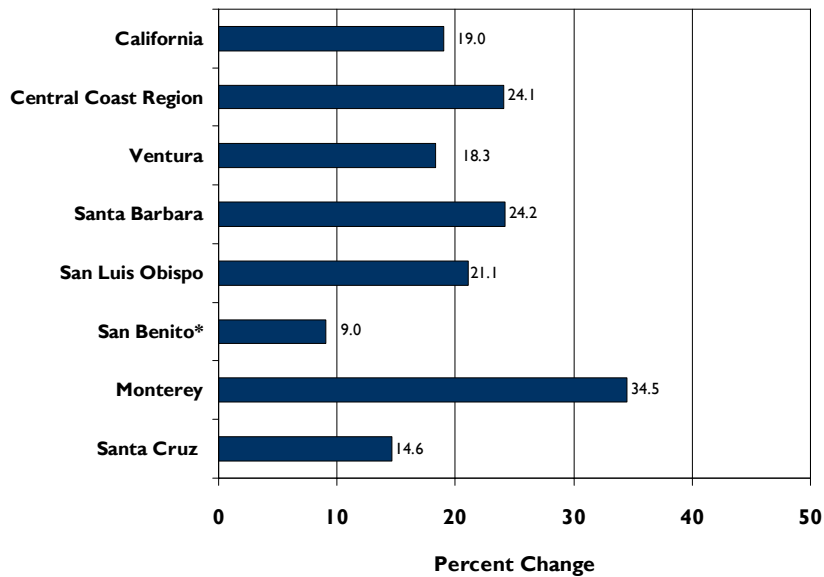


Figure 11: Percent Change in Population Born Outside of the United States, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005
 *2004 San Benito County data not available, thus 1990-2000 data presented.

North Central SLO County had the lowest percentage of immigrants in 2000 (4.7%) compared to North Salinas Valley (37.6) and South Santa Cruz County (37.7%), which had the highest. (Table 6 and Table 7).

Table 6: The 10 Communities with the Lowest Percentage of Immigrants, 2000

County	Community Cluster	Lowest % of Immigrants
San Luis Obispo	North Central SLO County	4.7
Santa Cruz	North Santa Cruz County	5.6
San Luis Obispo	San Luis Obispo Urban	7.7
San Luis Obispo	North Coastal SLO County	8.9
Santa Cruz	Central Santa Cruz County	9.0
Ventura	Ojai Valley	10.4
San Luis Obispo	South SLO County	10.6
San Luis Obispo	North SLO County	12.2
Ventura	Santa Rosa Valley	12.9
Ventura	Ventura Urban	13.1

Source: U.S. Census Bureau, 2000

Table 7: The 10 Communities with Highest Percentage of Immigrants, 2000

County	Community Cluster	Highest % of Immigrants
Santa Barbara	Goleta Valley	18.8
Santa Barbara	Santa Barbara Urban	22.9
Monterey	North Coastal Monterey County	24.0
Santa Barbara	Santa Maria Valley	25.7
Ventura	Santa Clara Valley	27.9
Ventura	Greater Oxnard Plains	34.1
Monterey	Salinas Urban	35.2
Monterey	South Salinas Valley	35.4
Monterey	North Salinas Valley	37.6
Santa Cruz	South Santa Cruz County	37.7

Source: U.S. Census Bureau, 2000

Single-Parent Households

Families headed by a single parent have often been implicated in challenges to children and family stability. With only one potential wage earner and only one potential caretaker, single parents face pressures not faced in two-parent households. The proportion of households that are single-parent families in the U.S. has been stabilizing at approximately 9 percent between 1995 and 2003 (Fields, 2003).

Nationally in 2004, the percentage of single-parent families with related children under age 18 that have incomes below the federal poverty level were 33 percent, compared to 7 percent of married families with children. In California, 29 percent of single parent families with children were below the poverty level, and 9 percent of married families with children (Annie E. Casey Foundation, 2006).

The U.S. Census Bureau reports on single-parent households headed by females (female householder families). Since 2000, the percentage of female householder families with children under 18 years has remained fairly stable in the Central Coast ranging from 6.1 percent in 2000 to 6.3 percent in 2004. California's rate in 2004 was 7.2 percent, virtually unchanged from 2000. Monterey County had the highest percentage of families headed by single women (8.2%), and San Luis Obispo County had the lowest (4.2%). (Figure 12).

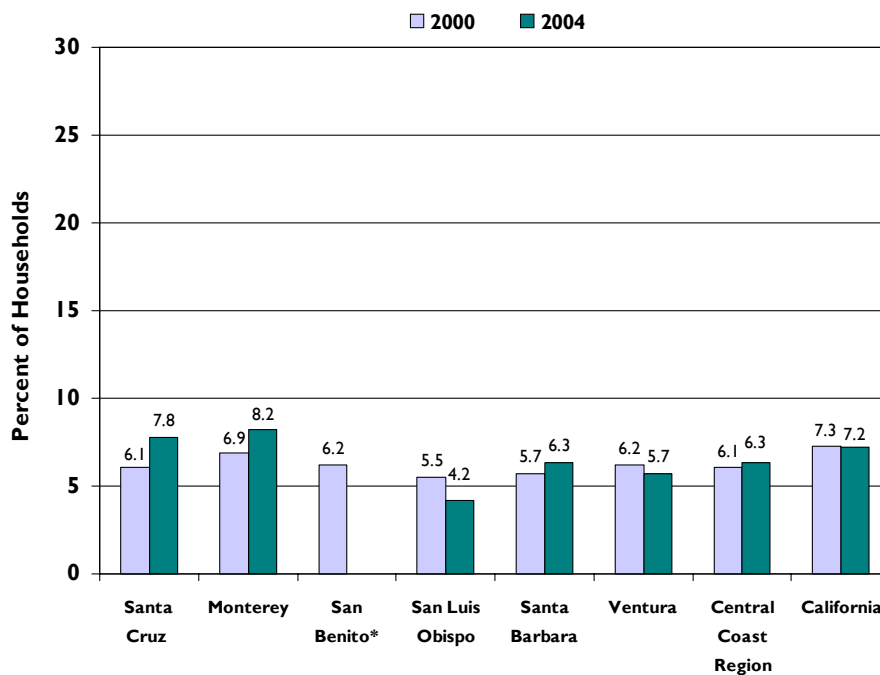


Figure 12: Percentage of Households Headed by Females, with Children Less Than 18 Years, Central Coast Region, 2000-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

A review of the community cluster data shows a wide variation in the percentage of single parent households headed by women. San Luis Obispo Urban had the lowest percentage of female householder families with 3.9 percent, while the community cluster with the highest percentage of female householder families was Salinas Urban (9.6%). (Table 8 and Table 9).

Table 8: The 10 Communities with the Lowest Percentage of Female Householder Families with Children, 2000

County	Community Cluster	% of Female Householder Families, with Children
San Luis Obispo	San Luis Obispo Urban	3.9
Monterey	Monterey Peninsula/Big Sur	4.0
Santa Barbara	Goleta Valley	4.1
Santa Barbara	Montecito/Carpinteria/Summerland	4.3
Ventura	Santa Rosa Valley	4.3
Santa Barbara	Santa Ynez Valley	4.4
San Luis Obispo	North Coastal SLO County	4.7
Santa Barbara	Santa Barbara Urban	4.8
Ventura	Conejo Valley	4.9
Santa Cruz	North Santa Cruz County	5.3

Source: U.S. Census Bureau, 2000

Table 9: The 10 Communities with the Highest Percent of Female Householder Families with Children, 2000

County	Community Cluster	% of Female Householder Families, with Children
Monterey	Salinas Urban	9.6
Ventura	Greater Oxnard Plains	8.0
Ventura	Ventura Urban	6.8
Santa Barbara	Lompoc Valley	8.0
Santa Cruz	South Santa Cruz County	7.9
Monterey	North Salinas Valley	7.9
Santa Barbara	Santa Maria Valley	7.1
San Luis Obispo	North Central SLO County	7.0
Ventura	Santa Clara Valley	6.9
Monterey	South Salinas Valley	6.8

Source: U.S. Census Bureau, 2000

Education

A person's educational level is related to health status, poverty, and employment. Education affects health literacy and the ability to read, understand and follow instructions. Furthermore, people with lower levels of education are also likely to have lower levels of income, and thus lower ability to meet the necessary costs of their family.

U.S. Census 2004 data showed that one in six (16.9%) residents, aged 25 and older, in the Central Coast lacked a high school diploma; improved from 21.1 percent in 1990. In comparison, 19.6 percent of California adults, 25 years and over, lacked a high school diploma in 2004. In Monterey County, 27.4 percent of adults did not have a high school education, compared to 8.3 percent in San Luis Obispo County. (Figure 13). The community cluster with the highest percentage of non-high school graduates

in 2000 was North Salinas Valley (48.1%) and the lowest was North Santa Cruz County (6.3%). (Table 10 and

Table 11).

The percentage of high school students completing high school in the Central Coast region has increased steadily from 86.5 percent in 1997-1998 to 92.2 percent in 2003-2004. The graduation rate for California overall in 2003-2004 was 85.3 percent.

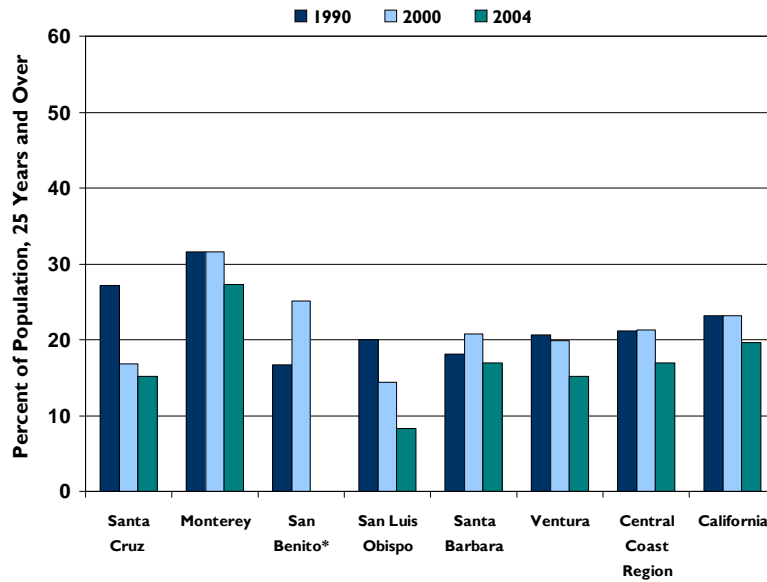


Figure 13: Percentage of Population, 25 Years and Over, Without a High School Diploma, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

Table 10: The 10 Communities with the Lowest Percentage of Persons, 25 Years and Over, Without a High School Diploma, 2000

County	Community Cluster	% of Persons without a High School Diploma
Santa Cruz	North Santa Cruz County	6.3
Santa Cruz	Central Santa Cruz County	6.6
Monterey	Monterey Peninsula/Big Sur	6.7
Ventura	Conejo Valley	7.8
San Luis Obispo	North Coastal SLO County	9.0
Ventura	Santa Rosa Valley	9.3
San Luis Obispo	North Central SLO County	10.8
Santa Cruz	Santa Cruz Urban	11.2
Ventura	East Ventura County	12.9
Ventura	Ojai Valley	13.3

Source: U.S. Census Bureau, 2000

Table 11: The 10 Communities with the Highest Percentage of Persons, 25 Years and Over, Without a High School Diploma, 2000

County	Community Cluster	% of Persons without a High School Diploma
Monterey	North Salinas Valley	48.1
Monterey	South Salinas Valley	45.8
Monterey	Salinas Urban	44.6
Santa Cruz	South Santa Cruz County	42.5
Ventura	Santa Clara Valley	39.1
Ventura	Greater Oxnard Plains	38.1
Santa Barbara	Santa Maria Valley	31.5
Monterey	North Coastal Monterey	25.3
San Benito	San Benito County	24.5
Santa Barbara	Lompoc Valley	20.1

Source: U.S. Census Bureau, 2000

Housing

The affordability of safe and suitable housing has an effect on people’s health. High housing costs can intrude into a family’s discretionary spending, leading to less available funds for nutritious food and health care. Lack of affordable housing also contributes to overcrowding and homelessness. Furthermore, the quality of housing can directly impact health through environmental factors such as lead paint, allergens, molds, poor water quality and air-borne pollutants.

The Central Coast has one of the most expensive housing markets in the nation, making purchasing a home unaffordable to most families who do not already own one. The Housing Opportunity Index is a measure of the percentage of homes sold in a given area that are affordable to families earning that area’s median income. The index shows that in 2005 fewer than 10 percent of families could afford to buy a home in most of the Central Coast. In the Oxnard-Thousand Oaks-Ventura area only 11.2 percent could afford a home. In Santa Barbara-Santa Maria only 3.2 percent could afford a home, and in Salinas only 3.7 percent could purchase a home. (Figure 14). Of note is that over half of families currently live in owner-occupied housing. (Figure 15).

Between 2000 and 2004, the median housing value has increased by more than 40 percent in Monterey, San Luis Obispo, Santa Barbara, and Ventura counties, ranging from a low of \$419,000 in San Luis Obispo to a high of \$577,000 in Santa Cruz County. Home and apartment rents have also increased significantly. Between 2000 and 2004 the median rent increased over 20 percent in Monterey, San Luis Obispo, Santa Barbara, and Ventura counties. In Santa Cruz County the increase was 18 percent.

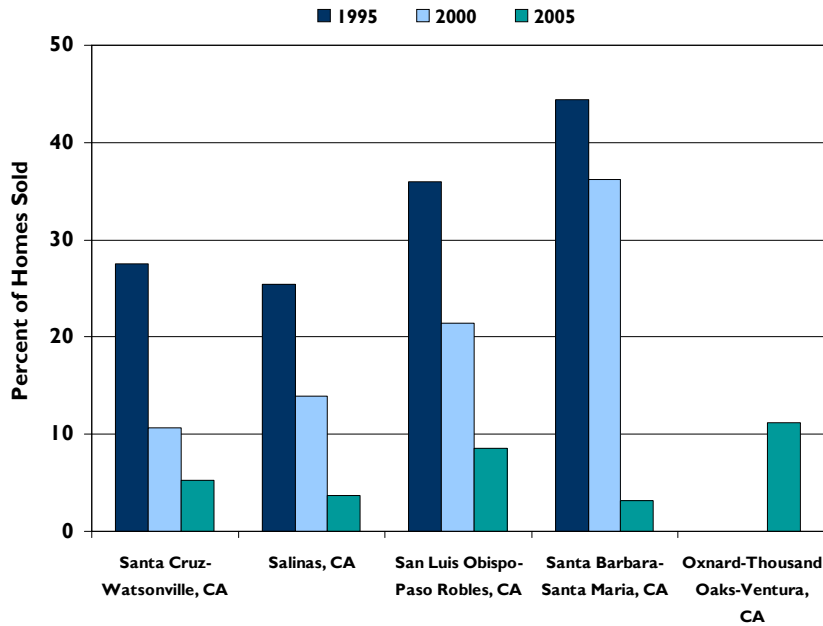


Figure 14: Housing Opportunity Index: Home Affordability by Metro Areas, Central Coast Region, 1995-2005

Source: National Association of Home Builders-Wells Fargo, 2005

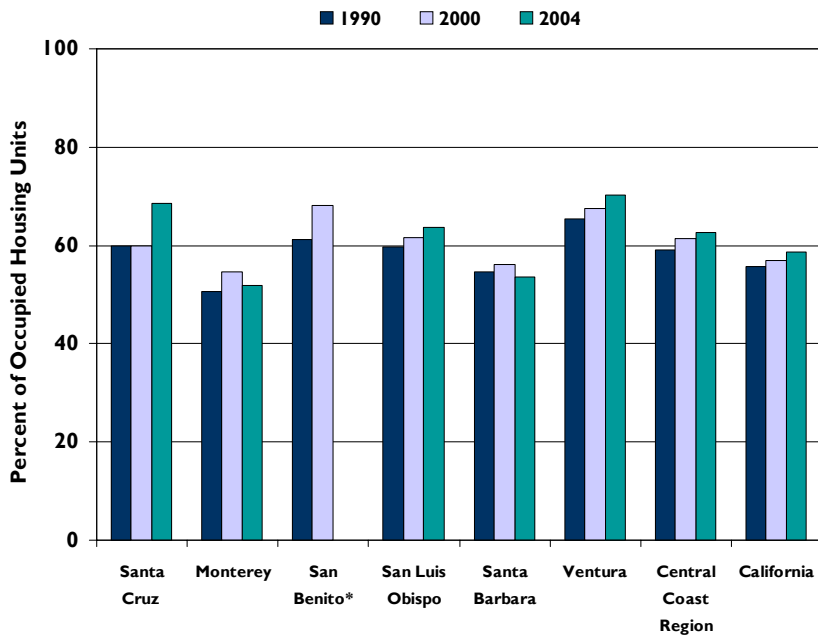


Figure 15: Percentage of Owner-Occupied Housing Units, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

Employment

A family's ability to support itself is nearly always dependent on having a job; very often both parents are required to work. Employment, depending on industry, has been a key source, although declining source of health insurance for American workers. People who are unemployed or underemployed often are unable to afford safe housing, nutritious food, and health care.

The Central Coast relies heavily on the government for employment, averaging 18.4 percent of jobs in the public sector since 1990. In comparison, an average of 16.0 percent of jobs in California were in this category. In 2004, leisure and hospitality accounted for 11.3 percent of jobs in the region, compared to 9.6 percent in California. While agriculture is a major employer in some counties, it only accounted for 7.8 percent of total employment regionally, compared to 17.8 percent in Monterey, 12.9 percent in San Benito, and 2.0 percent in California. Manufacturing jobs have declined since 1990, while leisure / hospitality and professional / business and education/health have increased slightly.

Between 1995 and 2000, unemployment rates among the civilian population, 16 or more years, decreased in the Central Coast counties and in California. However, unemployment rates have risen in the region and state since 2000. Santa Cruz, Monterey and San Benito Counties have had higher unemployment rates than the state since 1995. (Figure 16).

Seasonal differences due to the heavy reliance on agricultural employment pushed the January 2004 rate to 13.2 percent in Monterey County and 12.7 percent in San Benito County. California's unemployment rate was only 7.0 percent for the same period.

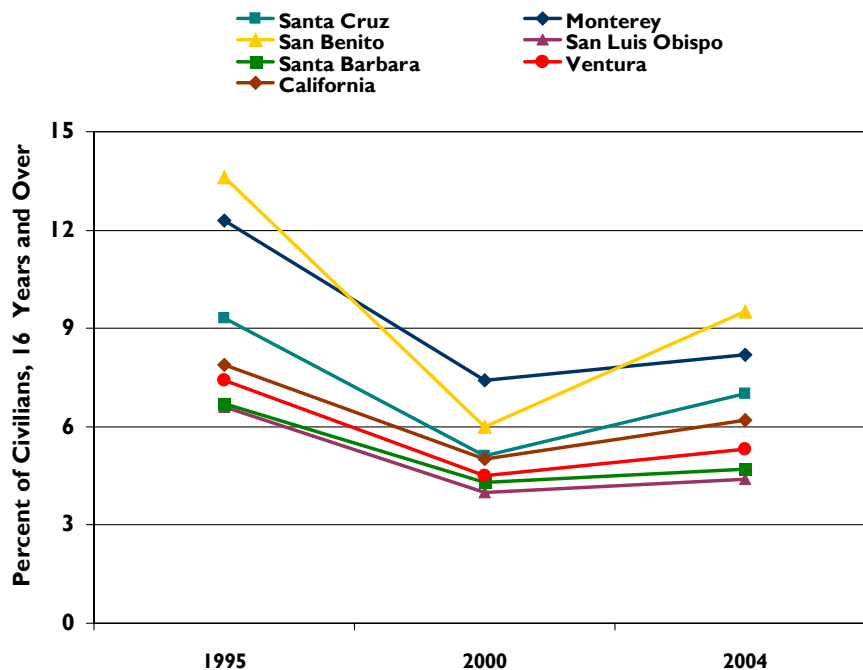


Figure 16: Unemployment Rate, Central Coast Region, 1995-2004
 Source: CA Employment Development Department, 2005

Income and Poverty

Income and poverty are highly associated with health status and access to health care. Persons with lower incomes generally tend to be in poorer health and to have less access to care due to less discretionary spending. In a region such as the Central Coast, where incomes are average and living costs are very high, making ends meet is difficult for families of modest means.

The average median family income in the Central Coast is slightly higher than that of California. The data gathered in 1999 for the 2000 U.S. Census show an unadjusted average median family income for the region was \$57,592, compared to the median family income of \$53,025 for California overall. By 2004, using 2003 income data adjusted to 2004 values, the Central Coast regional average rose to \$66,237 and the California median was \$58,327. In 2004, Monterey County had the lowest family income at \$56,489 and Santa Cruz County had the highest at \$75,759, followed closely by Ventura at \$75,490. (Figure 17).

However, the median income does not give a full picture of residents' incomes. Poverty, as determined by percentage of families and children living below the Federal Poverty Level (FPL for a family of four in was \$17,050 in 2000 and \$19,350 in 2005), has been growing on the coast at the same time that median income has been rising. In the Central Coast, approximately 7.6 percent of families lived in poverty in 2004, rising from 5.3 percent in 1990. Children are even more likely to live in poverty. In 2000, 14.2 percent of children lived at or below the federal poverty level, up from 12.6 percent in 1990. In 2004, more than one in five children in Monterey County (21.2%) lived in poverty, and in Santa Barbara County one in six children (16.6%) were living in poverty. (Figure 18).

Moreover, in addition to the federally defined level of poverty, another way to measure the ability of a family to meet basic needs is the California Self-Sufficiency Standard (Pearce, 2003). This standard sets a minimum family budget based upon local housing, childcare, food and other costs. In Monterey, Santa Barbara and Ventura, the annual self-sufficiency wage for a single parent, single child ranges from \$34,933 to \$39,152. In San Luis Obispo and San Benito, the required range is \$29,945 to \$33,622, and \$41,718 to 49,536 in Santa Cruz County. An approximate percentage of families below self-sufficiency for each county was generated based upon the nearest U.S. Census 2004 income interval corresponding to the county's self-sufficiency wage. Nearly one-third of families (32.3%) in Monterey County had less than \$35,000 in income. Other counties also had a high percentage of families below \$35,000 annual income: San Luis Obispo (22.4%), Santa Barbara (23.2%), and Ventura (16.3%). Santa Cruz County had 28.4 percent of families below \$50,000.

Furthermore, in line with the general increase in the median annual family income since 1989, the percentage of Central Coast families earning less than \$35,000 decreased from 38.7 percent in 1990 to 22.4 percent in 2004. During the same time period, the percentage of families earning more than \$150,000 per year increased from 2.9 percent to 12.9 percent in the Central Coast Region. (Figure 19). Ventura County, followed by Santa Cruz County, had the highest percentage of families earning above \$150,000 annually in 2004. (Figure 20).

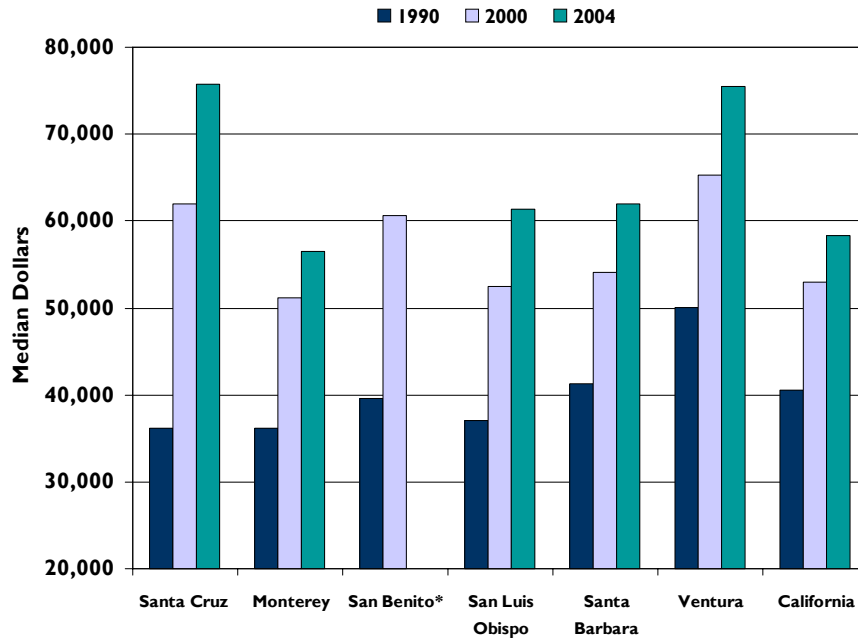


Figure 17: Median Family Income by Year, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

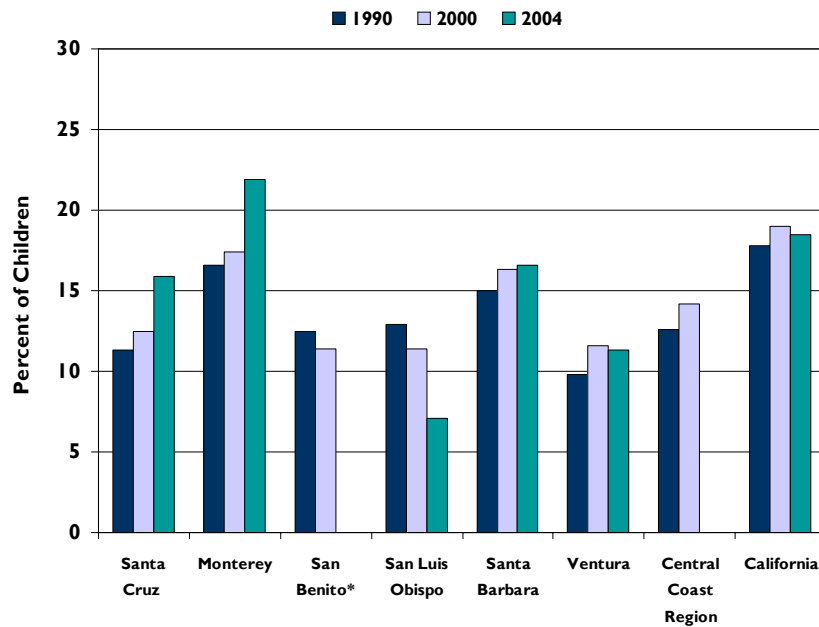


Figure 18: Percentage of Children in Poverty, Central Coast Region, 1990-2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County.

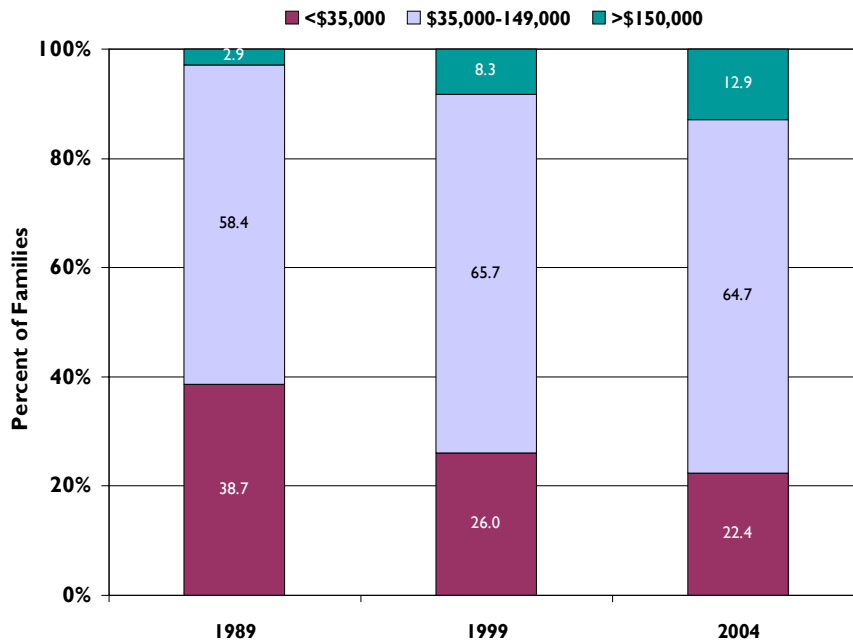


Figure 19: Percentage of Families by Category of Annual Income, Central Coast Region, 1990-2004
Source: U.S. Census Bureau, 2005

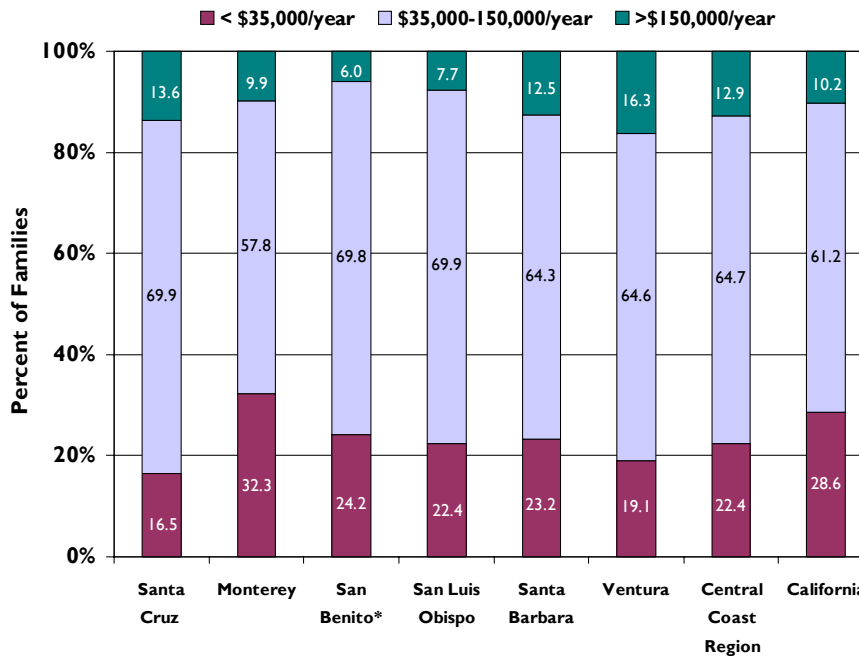


Figure 20: Percentage of Families by Category of Annual Income by County, Central Coast Region, 2004

Source: U.S. Census Bureau, 2005

*2004 data does not include San Benito County, thus 2000 data is presented.

The extent of income diversity in the Central Coast is made apparent when examining the community clusters based upon percentage of families in poverty according to U.S Census 2000. There were five-fold variations in the percentage of families living in poverty among communities in the Central Coast. Rates of families in poverty ranged from 15.3 percent in South Salinas Valley to 2.7 percent in Central Santa Cruz County. (Table 12 and Table 13).

Table 12: The 10 Communities with the Lowest Percentage of Families in Poverty, 2000

County	Community Cluster	% of Families in Poverty
Santa Cruz	Central Santa Cruz County	2.7
Ventura	Conejo Valley	3.2
Monterey	Monterey Peninsula/Big Sur	3.3
Ventura	Santa Rosa Valley	3.5
Ventura	East Ventura County	3.8
Santa Cruz	North Santa Cruz County	4.5
Santa Barbara	Montecito/Carpinteria/Summerland	4.5
Santa Barbara	Santa Ynez Valley	5.3
San Luis Obispo	North Coastal SLO County	5.4
Ventura	Ojai Valley	5.8

Source: U.S. Census Bureau, 2000

Table 13: The 10 Communities with the Highest Percentage of Families in Poverty, 2000

County	Community Cluster	% of Families in Poverty
Monterey	South Salinas Valley	15.3
Monterey	North Salinas Valley	12.8
Monterey	Salinas Urban	12.8
Santa Cruz	South Santa Cruz County	12.1
Ventura	Santa Clara Valley	12.0
Santa Barbara	Santa Maria Valley	11.9
Ventura	Greater Oxnard Plains	11.1
Santa Barbara	Lompoc Valley	10.0
San Luis Obispo	North SLO County	9.5
Monterey	North Coastal Monterey County	8.4

Source: U.S. Census Bureau, 2000

B. SELECTED ISSUES OF “AT-RISK” POPULATIONS

Nation-wide several groups of people are vulnerable to comparatively poorer health status than the average resident as they do not have the awareness or resources to participate in available health care services. Health policy makers should pay particular attention to ensuring that population groups, such as low-wage workers, farmworkers, children in immigrant families and seniors, are able to participate. Data pertaining to these groups are presented in this section.

Low-Wage Service Workers

One of the vulnerable populations on the Central Coast that receives little attention within health policy and programs is the large group of low wage workers and their families. Two industries – agriculture and leisure and hospitality – account for more than one in five (20.8%) jobs in the Central Coast, compared to 11.9 percent statewide. (Figure 21). The salaries and employment benefits in these sectors are generally less than other industries, making it difficult for workers to obtain health insurance, afford decent housing, and make ends meet. Data show that these low wage workers face increased barriers to health care, often resulting in reduced health status.

According to the California Department of Employment Development, during the third quarter of 2005 the mean wages for selected service occupations on the Central Coast were close to half of the state’s average mean hourly wage of \$20.64. The mean hourly wage for cleaning and maintenance workers was \$11.94; child care workers, \$10.12, home health aides, \$9.77; and food preparers, \$9.30 (CA Employment Development Department, 2005a). Full time workers at these wages fall below the California Self-Sufficiency Standard (Pearce, 2003).

These low-wage occupations were held by high percentages of Latinos (48.6%) women (46.2%) (2003 CHIS). Low-wage workers also were less likely to have health coverage, a usual source of care and were less likely to use primary and preventive health services. Adult workers in the service industries were among the least likely workers to have health insurance. According to CHIS 2003, one in three (32.9%) Central Coast service workers, compared to 17 percent of all workers, did not have health insurance coverage. (Figure 22).

Furthermore, one in five service workers (20.3%) did not have a usual source of care, compared to 15.4 percent of all workers. (Figure 22). Similarly, service workers were less likely to have seen a doctor in the past year (27.1% of service workers had no doctor visits in past year, compared to 22.2% of all workers). (Figure 23). Four in ten (40.2%) female service workers, age 30 and over, had never had a mammogram, compared to 26.7 percent of all similar workers.

Service industry workers were also far more likely to report their health status as “fair” or “poor”. One in four service workers (24.7%) described their health status as “fair” or “poor”, compared to 15.4 percent of all workers. (Figure 23).

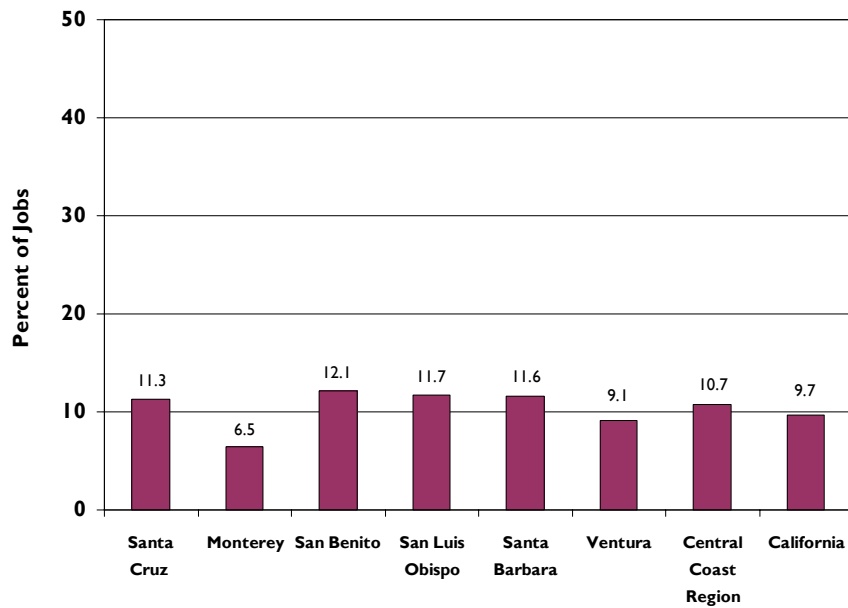


Figure 21: Percentage of Jobs in Hospitality and Leisure, Central Coast Region, 2004
 Source: CA Employment Development Department, 2005

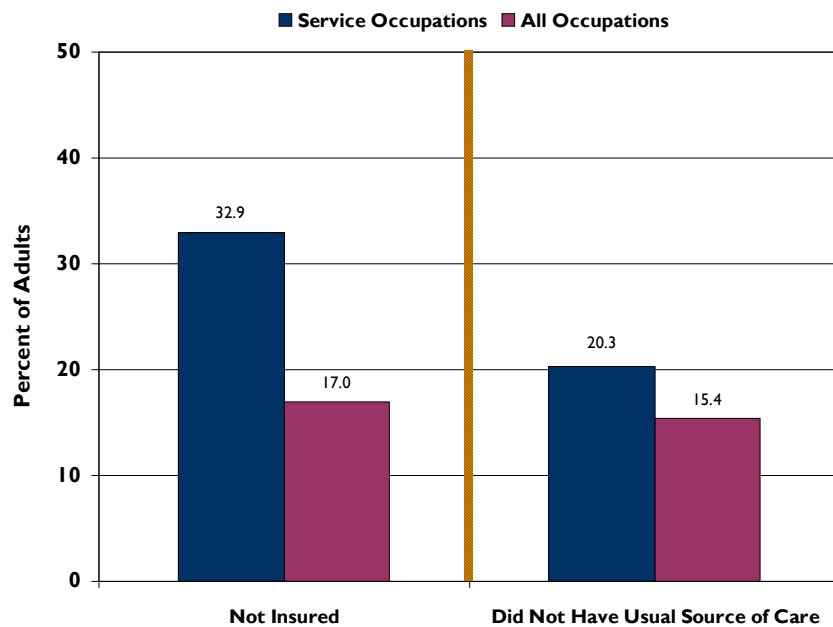


Figure 22: Percentage of Adults in Service Occupations Without Insurance and Without Usual Source of Care, Central Coast Region, 2003
 Source: 2003 CHIS, UCLA Center for Health Policy Research, 2005

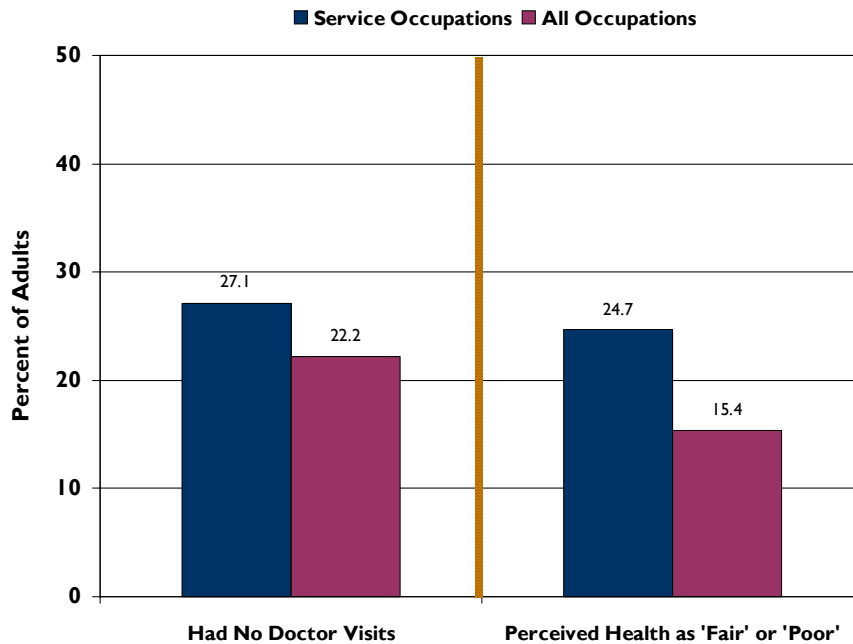


Figure 23: Percentage of Adults in Service Occupations Who Perceived Their Health to Be 'Fair' or 'Poor' and Who Had No Doctor Visits in the Last Year, Central Coast Region, 2003
Source: 2003 CHIS, UCLA Center for Health Policy Research, 2005

Absent universal health coverage, providing comprehensive and affordable health coverage for low wage workers is daunting. Industries with low profit margins and high competition find it difficult to provide benefits, such as health coverage. Workers themselves find it difficult to afford the health coverage even if it is available. Dependent coverage is particularly expensive, although coverage for children has become increasingly available through the statewide Healthy Families program and Healthy Kids in some counties.

Given the high cost of living on the Central Coast, some local governments have mandated a *living wage* for those vendors that do business directly with the municipality. For instance, the City of Santa Cruz requires that business who contract with the City for \$10,000 or more in certain services pay their workers a *living wage*. The County of Ventura adopted a living wage ordinance in 2001 that requires certain suppliers to pay a wage of no less than \$8.00 per hour with health benefits or \$10 per hour if health benefits are not supplied.

Farmworkers

Agriculture is nearly an \$8 billion a year industry on the Coast. All Central Coast counties, except for San Benito are in the top 20 agricultural counties in the state. There were between 100,000 and 150,000 migrant and seasonal farmworkers in the Central Coast, comprising between approximately 20 percent and 30 percent of the state's farmworkers in 2005 (Migrant Health Program, 2000 and CA Employment Development Department, 2005). (Figure 24). The mean wage for Central Coast

farmworkers, according to the California Department of Employment Development reports from employers in the third quarter of 2005, was \$9.47 an hour, less than half of the state's average mean wage of \$20.64.

There are two comprehensive surveys that provide valuable information on the farmworker population in California. The California Agricultural Workers Health Survey (CAWHS) conducted by the California Institute for Rural Studies was the largest interview survey of its kind and included physical examinations and blood tests. The CAWHS report, *Suffering in Silence*, was published jointly with The California Endowment in 2000 (Villarejo, 2000). The California sample of the National Agricultural Workers Survey (CAL-NAWS) sheds additional light on the farmworker population. The CAL-NAWS interviewed 2344 farmworkers during 2003-2004 in California's agricultural counties including Monterey, San Luis Obispo, and Ventura Counties (Aguirre International, 2005). Further data on the Salinas Valley and Oxnard/Santa Clarita Valley are presented in two case studies published by the California Institute for Rural Studies in 2003 (Strochlic, 2003 and Schroeder, 2003). These studies provide an in-depth analysis of the demographics, health care and health status of farmworkers in Monterey and Ventura Counties.

CAWHS reported that 64 percent of California farmworkers were male and 59 percent were married. The median age was 34 years. Ninety-two percent of the farmworkers were immigrants; 96 percent described themselves as Mexican, Hispanic, or Latino and 8 percent were of indigenous origin. Sixty-three percent had six or fewer years of formal education and only half said they could read Spanish well.

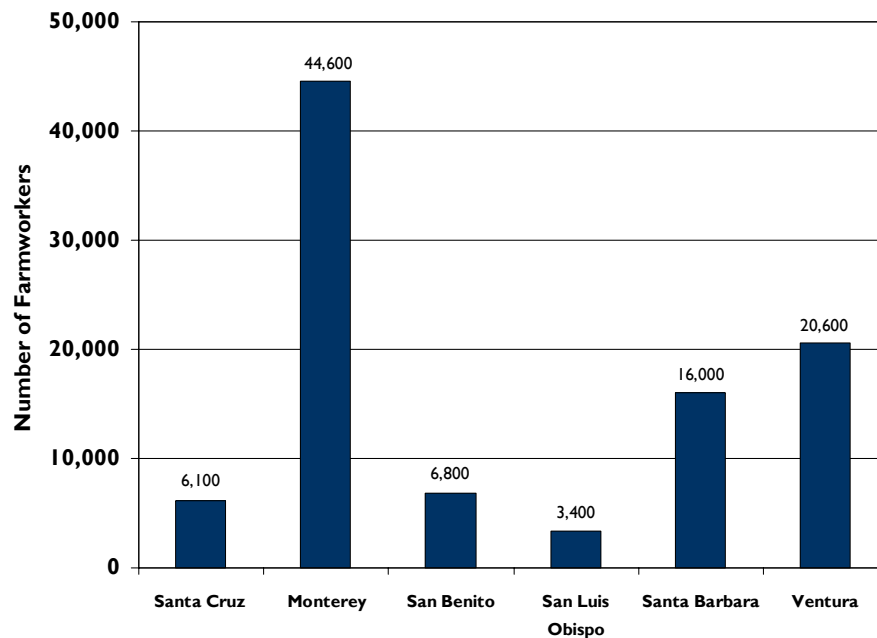


Figure 24: Number of Farmworkers, Central Coast Region, 2005
 Source: CA Employment Development Department, 2005

Among the CAL-NAWS findings are:

- More than half of the farmworkers in California had no work authorization (57%), 10 percent were U.S. citizens and 33 percent were legal permanent residents.
- Forty-three percent of all individual farmworkers and 30 percent of farmworker families earned less than \$10,000 per year. Twenty-two percent of California farmworkers had annual incomes below the federal poverty level, which was \$9,573 for an individual.
- Despite their low incomes, less than one-third of workers made use of needs-based services (30%).
- Nearly 9 in 10 farmworkers (88%) in California cannot minimally communicate in English.

Indigenous farmworkers

A growing subset of farmworkers are those of indigenous origin from Mexico or Central America. Because of their language and culture, they are distinct from those who speak Spanish. Thousands of newly arrived workers, legal and illegal, are from indigenous communities in the Mexican states of Oaxaca, Guerrero, Chiapas, and more recently the Yucatan, Puebla, and Tlaxcala regions. Many speak Mixtec, Zapotec, Trique, Chatino, Nahuatl, and Mayan rather than Spanish. In California, enclaves of thousands of Mixtecos are found in such distinct areas as Madera, Livingston, San Diego, Tulare, Santa Barbara, Oxnard, and Santa Maria. (Grieshop, 2000). The indigenous population is often considered the fastest growing farmworker population in California. Thirty-eight percent of newly arrived farmworkers, living in the U.S. less than two years, were indigenous (CAL-NAWS).

Estimating the number of indigenous farmworkers is very difficult. Serious undercounts of farmworkers, and particularly those of indigenous origin, are well documented (Kissam, 2004) On one hand, the U.S. Census 2000 reported only 11,461 “Hispanic American Indian” residents in the Central Coast Counties, without regard to age or occupation (Murillo, 2004) Yet the CAL-NAWS study estimates that between 16 percent and 20 percent of farmworkers are of indigenous origin. That would mean that there are approximately between 17,500 and 27,000 indigenous farmworkers on the Central Coast based on estimates of 100,000 to 150,000 Central Coast farmworkers.

According to CAL-NAWS, indigenous farmworkers differ from other California farmworkers in a number of respects. They are more likely to not have work authorization (85% of indigenous farmworkers lacked work authorization compared to 57% of all California farmworkers). Indigenous farmworkers are also more likely to be migrant, i.e., travel more than 75 miles to obtain a job. More than half (52%) of Mexican-born workers of indigenous origin were migrant, compared to one-third (33%) or California farmworkers (CAL-NAWS). Also, indigenous workers were less likely to have used health services in the United States (33% of indigenous workers compared to 49% of all California farmworkers).

Indigenous farmworkers and their families face challenges to obtaining health care. The lack of familiarity with Spanish and English acts as a barrier, as does their unfamiliarity with Western medicine and with such concepts as preventive and prenatal care. They often have different belief systems and rely on indigenous healers, *curanderos*, and folk and herbal remedies for care. Furthermore, since indigenous farmworkers tend to migrate more, they often lack a usual source of care. Efforts to provide services and organize the indigenous-language groups exist in places such as Ventura County where two clinics specialize in Mixtec care and offer translators.

Various health problems have been documented among California farmworkers falling into four significant areas:

- Risk of chronic disease. Nearly one in five men (18%) had at least two of three risk factors for chronic disease: high serum cholesterol, high blood pressure, and obesity. Specifically:
 - Thirty-three percent of male farmworkers between the ages of 35 and 44 had high blood pressure, compared to 20 percent of males in the same age group in the general population (CAWHS).
 - As measured by Body Mass Index (BMI), 81 percent of male and 76 percent of female farmworkers had overweight or obese weight. Within these percentages, 28 percent of male and 37 percent of female farmworkers were obese (CAWHS). (Figure 25). Comparatively in California overall, 64.5 percent of adult males and 47.0 percent of adult women were overweight or obese (2003 CHIS).

 - Health insurance
 - Nearly 70 percent of farmworkers lacked any form of health insurance and only 7 percent were covered by any of the various government-funded programs intended to serve low-income persons (CAWHS). (Figure 27). There were similar findings in CAL-NAWS, which also found that 79 percent of California farmworkers with children said their children have health insurance, mostly (76%) through government programs.
 - Just 16.5 percent of farmworkers said their employer offered health insurance, but nearly one-third of these same workers did not participate in the insurance plan that was offered, most often because they could not afford either the premiums or the co-payments (CAWHS).

 - Health care utilization
 - Nearly one-third of male farmworkers (32.0%) interviewed said they had never been to a doctor or clinic in their lifetime. In contrast, over one-third of female farmworkers (37.5%) reported having a medical visit within the five months prior to the interview (CAWHS).
 - One-half of all male farmworkers and two-fifths of female farmworkers said they had never been to a dentist (CAWHS).
 - More than two-thirds of all farmworkers reported never having had an eye-care visit (CAWHS).
 - Nearly half (49%) of California farmworkers said they used some type of health care service, whether from doctors, nurses, dentists or hospitals, in the U.S. at least once in the two years prior to their interview (CAL-NAWS). (Figure 26).
 - The majority of workers who sought health care (51%) went to a private doctor's office or private clinic and only seven percent visited a migrant health clinic. Nearly
-
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two-thirds paid most of the bill out of their own pocket or used Medi-Cal (41% and 21% respectively) (CAL-NAWS).

- The greatest barrier California farmworkers faced in getting the health care was the cost; 83 percent said that health care is too expensive (CAL-NAWS).
- The frequency of health care visits among unauthorized individuals and those of indigenous origin was lower than for California farmworkers in general, as only 29 percent of unauthorized workers and 33 percent of indigenous workers in 2003-2004 said they visited a health care professional in the U.S. in the past two years (CAL-NAWS).
- Occupational health and safety
 - Approximately 18.5 percent of farmworkers reported having had a workplace injury at some point in their farm working career, for which they were compensated by the California Workers Compensation Insurance System. However, just one-third of all CAWHS participants believed that their employer had such coverage, despite the fact that California law requires such coverage (CAWHS).
 - In CAWHS, only 57 percent of farmworkers said they had received mandated pesticide safety training, whereas 86 percent of CAL-NAWS respondents said that they had received required training. These findings rely on workers' reports and do not necessarily ensure employer compliance with federal or state regulations.
 - CAWHS found that more than 82.0 percent of farmworkers reported that their employer provided toilets, wash water, and clean drinking water, as required by law. In CAL-NAWS, nearly all farmworkers (99%) reported the availability of all required field sanitation facilities.
 - In reporting on injuries related to their work in the fields, 24 percent of respondents suffered from at least one musculoskeletal problem in the 12 months prior to their interview, 12 percent stated they experienced at least one skin problem, and, apart from those times when they were suffering from colds, 16 percent of workers experienced watery or itchy eyes and 14 percent had runny or stuffy noses (CAL-NAWS).

The studies show that the risks for chronic disease, such as heart disease, stroke, asthma, and diabetes, are startlingly high for a group that is mostly comprised of young men who would normally be in the peak of physical condition. With between 20 and 30 percent of California's farmworkers residing in the Central Coast, the burdens imposed by high rates of chronic disease, low rates of health insurance, lack of access to care, and workplace safety issues are enormous. Efforts to cover farmworkers are underway in a number of counties, and may provide lessons for the industry.

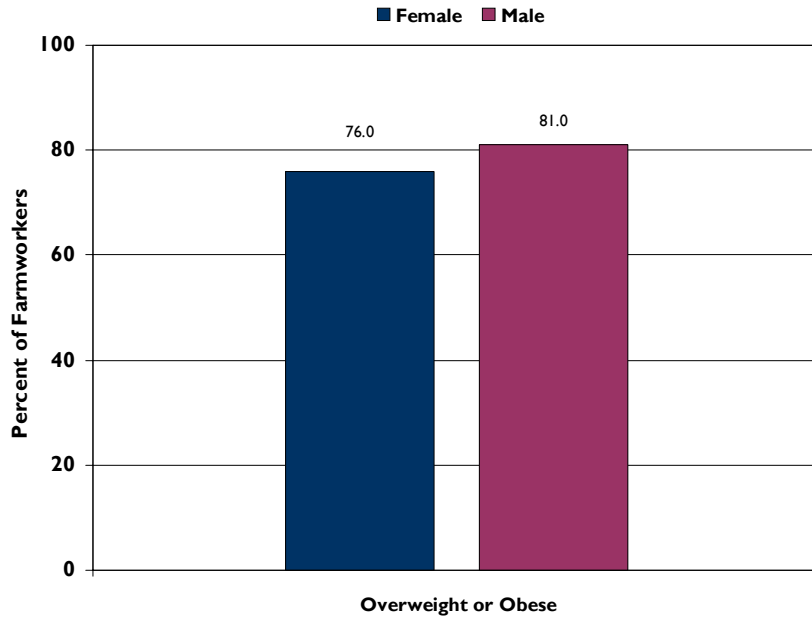


Figure 25: Percentage of Farmworkers Who Were Overweight or Obese, California, 2000
Source: CAWHS, 2000

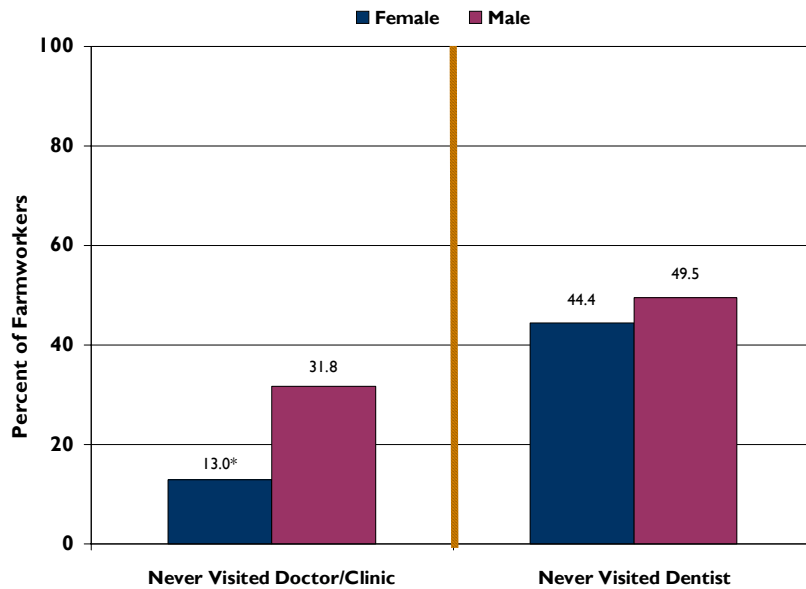


Figure 26: Percentage of Farmworkers Who Never Visited a Doctor and Who Never Visited a Dentist, California, 2000
Source: CAWHS, 2000
*Approximate percentage.

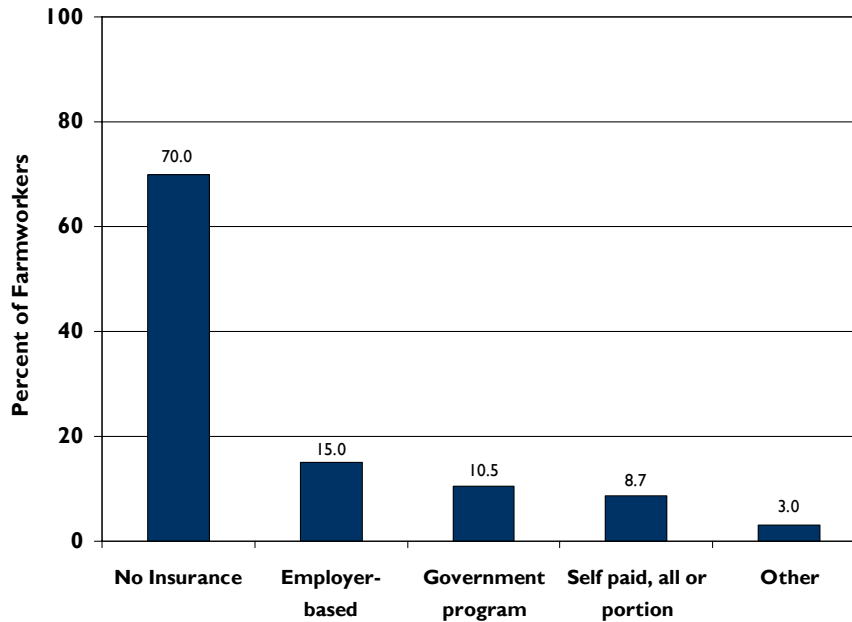


Figure 27: Percentage of California Farmworkers by Insurance Type, 2003-04

Source: CAL-NAWS, 2005

Children in Immigrant Families

Children in immigrant families often face challenges in accessing the health care system. Immigrant parents are often unaware of government health programs or are fearful of potential harm to their immigration status through the use of public programs. As such, they may be unwilling to apply for programs such as Healthy Families or Medi-Cal for which their children are eligible. Outreach efforts and education are essential components to inform immigrant parents about the need for, and their right to receive, assistance for their children.

Analysis of 2001 CHIS data showed that nearly half of children on the Central Coast (45%) have at least one parent who was born outside of the United States. Of these children in immigrant families, over seven out of ten (73%) were U.S.-born children of documented immigrant parents who were either naturalized, legal permanent residents, refugees, or other documented aliens. A significant percentage of children in immigrant families (10.0%) were U.S.-born and lived in families with at least one undocumented parent. Another 6.4 percent were immigrant children without legal documentation who lived mainly with both undocumented parents (Pourat, 2003). (Figure 28).

The children in immigrant families in the Central Coast were far more likely to be poor. In 2001, only 6 percent of U.S.-born children of U.S.-born parents lived at or below the poverty level, compared to 71 percent of U.S.-born children with at least one undocumented parent, and 66 percent of immigrant children without documented legal status (2001 CHIS).

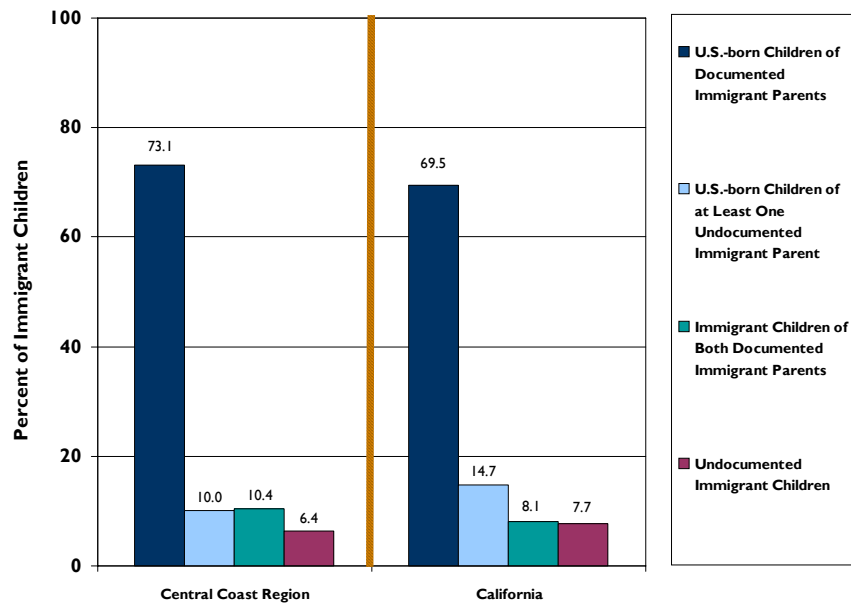


Figure 28: Percentage of Children in Immigrant Families by Citizenship Status, Central Coast Region, 2001

Source: Pourat, 2003

The health coverage rate for Central Coast children in immigrant families was highly related to their parents' citizenship status. 2001 CHIS findings showed that 91 percent of Central Coast U.S.-born children of two U.S.-born parents had continuous health insurance coverage during the year prior to the survey. Fewer U.S.-born children of documented immigrant parents (80%) and even fewer of immigrant children of documented immigrant parents (59%) had continuous health insurance coverage in the year prior to the survey. Health insurance coverage was even less likely for undocumented immigrant children; less than half (48%) of undocumented immigrant children had continuous health insurance coverage in the year prior to the survey (Pourat, 2003). (Figure 29).

Even when uninsured, U.S.-born children of documented immigrant parents were largely eligible for enrollment in public programs that provide coverage. Approximately 86 percent of the U.S.-born uninsured children met the eligibility criteria for either the Medi-Cal or Healthy Families programs (Pourat, 2003).

Several Central Coast counties have begun programs to extend comprehensive health insurance (medical, dental and vision) to all children under 300% of the federal poverty level. These children's health initiatives engage in outreach and enrollment to sign up all children eligible for existing programs (e.g. Medi-Cal and Healthy Families). For those that are not eligible either due to income or immigration status, the community initiatives provide coverage through a local product called Healthy Kids. In the spring of 2006, 1815 children in Santa Cruz County, 520 children in San Luis Obispo County and 320 in Santa Barbara County were covered in this program.

The health status of Central Coast children was also directly related to immigration status. Children with immigrant parents were far less likely to have their health reported as excellent or very good than were children of U.S.-born parents. For example, 79 percent of U.S.-born children of U.S.-born parents

were reported to be in excellent or very good health, compared to 53 percent of U.S.-born children with documented immigrant parents, and 35 percent of U.S.-born children with at least one undocumented parent (2001 CHIS). (Figure 29).

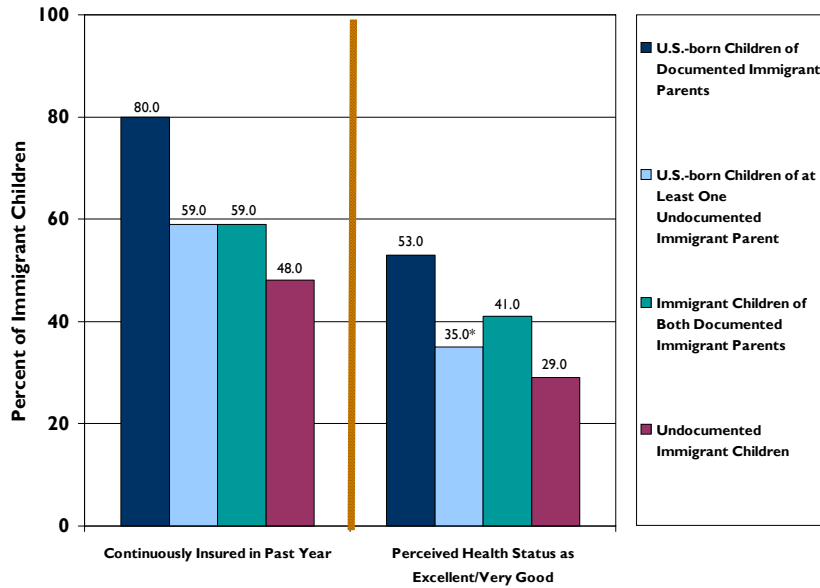


Figure 29: Percentage of Children in Immigrant Families with Continuous Health Coverage in Prior Year and Perceived Health Status, Central Coast Region, 2001

Source: Pourat, 2003

*Data is unstable due to small sample size and should be interpreted with caution.

Low-Income Elderly Population

Comprising approximately 11.4 percent of the Central Coast’s population, there were projected to be approximately 250,000 seniors age 65 and over in 2005. The elderly population is expected to grow to 12.3 percent of the population, or about 291,000, by the year 2010 (CA Department of Finance, 2005). (Figure 30).

Contrary to popular belief, not all seniors in the Central Coast region are well-off. Approximately one out of four residents (23.3%) age 65 and over had household income below 200% of the federal poverty level (\$26,400 for a family of two in 2006) according to the U.S. Census 2000 (Wallace, 2003). Elderly Native Americans (12.6%), African Americans (12.5%), Latinos (11.4%), and Asian Americans (8.2%) are more likely to be living below the poverty level than elderly whites (5.3%). While nearly all of the elderly were on Medicare, approximately 30,500 seniors, aged 66 and over, or 12 percent of the senior population, were also enrolled in the Medi-Cal program as of October 2005 (Wallace, 2003).

Lower income seniors, Latino elderly and those on Medi-Cal generally reported lower perceived health status, and less use of preventive screenings and primary care than the general senior population. (Figure 31 and Figure 32). While a higher percentage of Latinos compared to the total elderly population reported having been diagnosed with diabetes and cancer, lower percentages reported being diagnosed

with heart disease and hypertension. Over four in ten (41.0%) elderly on Medi-Cal had not seen a dentist or hygienist in the past year, even though Medi-Cal covers dental services.

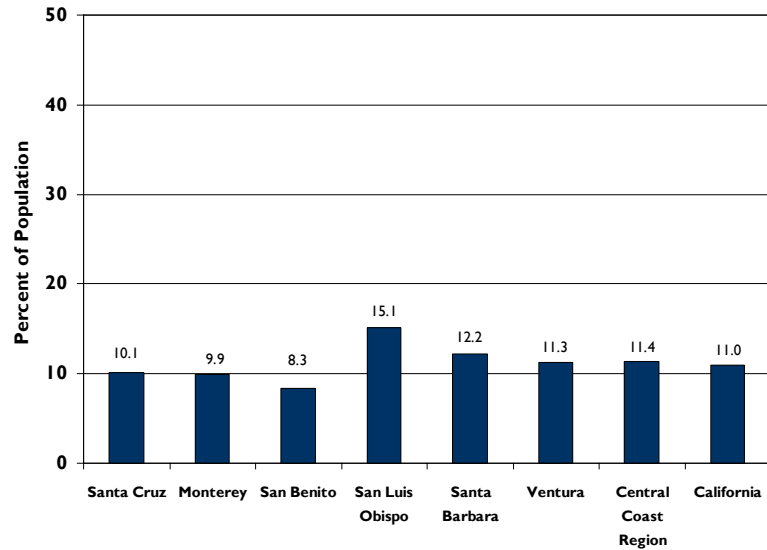


Figure 30: Projected Percentage of Population that is 65 Years and Over, Central Coast Region, 2005

Source: CA Department of Finance, 2005

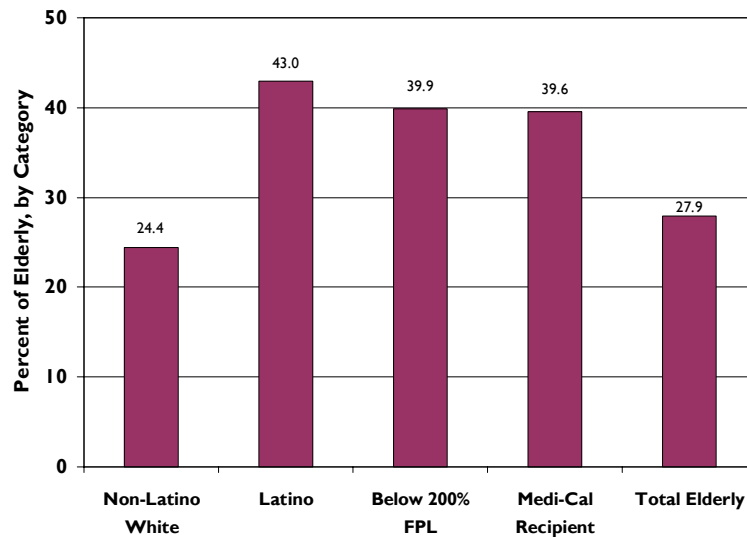


Figure 31: Percentage of Elderly Residents, 65 Years and Over, Who Perceived Their Health as 'Poor' or 'Fair' within Ethnic, Federal Poverty Level, Medi-Cal Receipt Categories, Central Coast Region, 2001

Source: Wallace, 2003

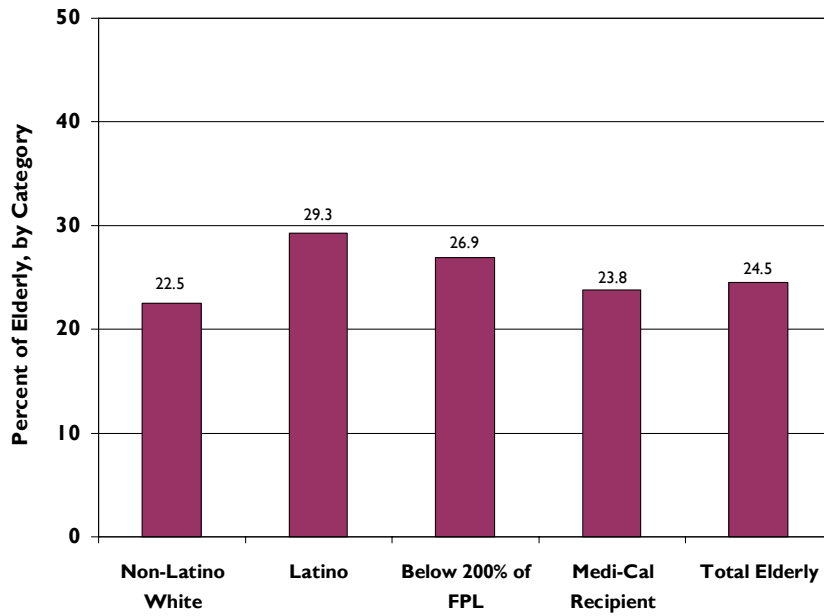


Figure 32: Percentage of Elderly Residents, 65 Years and Over, with Fewer Than Two Doctors Visits in the Past Year within Ethnic, Federal Poverty Level, Medi-Cal Receipt Categories, Central Coast Region, 2001
Source: Wallace, 2003

C. ENVIRONMENTAL ISSUES

Air Quality

Air pollution is a widespread public health and environmental problem in the United States. Exposure to air pollution can substantially contribute to premature death, cancer, and long-term damage to respiratory and cardiovascular systems. Air pollution also damages trees, crops, and buildings, and air pollution contaminates the soil and in bodies of water where they alter the chemistry of the water and the organisms living there.

Air quality has not been a serious issue in the Central Coast, but it is a growing concern in the southern counties. Ventura County experienced 6.8 percent of day in 2004 with the designation of 'unhealthy' or 'unhealthy for sensitive populations'. Half of the days (49.7%) were designated of 'moderate' air quality in Ventura County, compared to fewer than 15 percent elsewhere. (Figure 33). Also, Ventura was the only county in excess of the 8-hour ozone national standard (.08 ppm) with a measurement of annual average measurement of .092. Santa Barbara was at the national standard with 0.08 (U.S. Environmental Protection Agency, 2005). Emissions from motor vehicles account for more than half of Ventura County's air pollution. Other pollution sources include business, industry, agriculture, fires, and household products (VCAPCD, 2006).

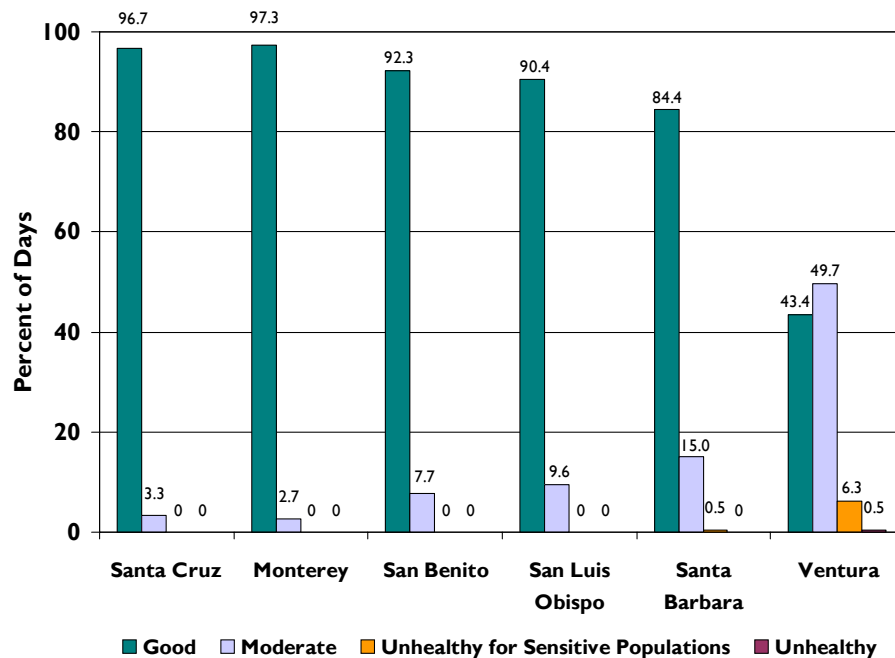


Figure 33: Percentage of Days by Level of Air Quality, Central Coast Region, 2004
 Source: Environmental Protection Agency, 2005

Pesticide Use

Pesticides are toxic substances purposefully used to eliminate pests. While pesticides do reduce crop damage and improve product marketability, they also eliminate non-targeted insects and are toxic to birds and fish. Pesticides have been found to cause breathing problems in people, and even cancer with long-term exposure. Acute exposure, such as when working with pesticides, can cause nausea, vomiting, headaches, burning eyes and shortness of breath (CA Department of Pesticide Regulation, 1999).

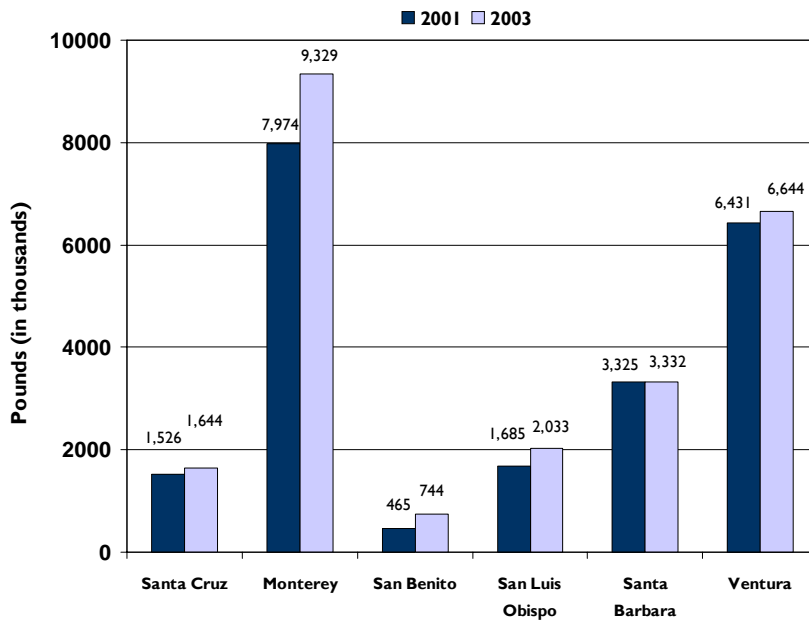


Figure 34: Total Pounds of Pesticides Used, Central Coast Region, 2001-2003

Source: CA Department of Pesticide Regulation, 2005

In 2003, over 23 million pounds of pesticides were used in the Central Coast (CA Department of Pesticide Regulation, 2005). (Figure 34). Of the 23 million pounds of pesticides used in the region approximately 4.7 million pounds were sulfur, used by both conventional and organic growers. There were also 8.9 million pounds of the fumigants metam-sodium (1.5 million), methyl bromide (4.0 million) and chloropicrin (3.4 million) used in 2003. Used largely in strawberries to fumigate the soil, these pesticides are not without risk. Metam-sodium, a highly toxic carcinogen was implicated in a 1999 pesticide incident in Earlimart, which sent two dozen people to the hospital complaining of nausea, vomiting, headaches, burning eyes, and shortness of breath (CA Department of Pesticide Regulation, 2001). Methyl bromide is an odorless, colorless gas that has been used as an agricultural soil and structural fumigant to control a wide variety of pests. It is highly toxic to humans and animals, as well as being an environmentally detrimental ozone depleter. Chloropicrin is a highly toxic insecticide and a soil fumigant used primarily for soil fumigation to control soil borne fungi, diseases and nematodes. It is often mixed with methyl bromide due to its sharp highly irritating odor.

Strawberries, a major Central Coast crop accounted for 8.2 million pounds, or approximately one-third of pesticide use. At least 40 percent of strawberry pesticide use was methyl bromide. Wine grapes

accounted for 5 million pounds of pesticides, approximately 80 percent of which was sulfur (CA Department of Pesticide Regulation, 2005).

In recent years, reported poisonings from pesticides have been reduced in California, in large part due to strict enforcement and reporting laws. However, in 2003, there were 614 ‘definite’ or ‘probable’ cases of pesticide poisoning in California reported to the Department of Pesticide Regulation (CA Department of Pesticide Regulation, 2005). Twenty-six, or 4.0 percent, of these incidents were in the Central Coast region.

Water Quality

Like air, water is an essential resource for human life. Though there are a number of water quality issues of concern to human health in the Central Coast area, e.g. MTBE, perchlorate, and PCE in groundwater and persistent DDT in fish and shellfish from some areas, many are localized in nature and not all represent serious threats to human health. However, persistent issues related to quality of drinking water and recreational water exist.

Drinking water

Nitrate, particularly from fertilizers, is a pervasive problem in drinking water throughout the U.S., and the Central Coast of California is no exception. The federal drinking water standard for nitrate was originally established to protect infants against methemoglobinemia (Blue Baby Syndrome). More recent research has implicated nitrate in other health effects at even lower concentrations.

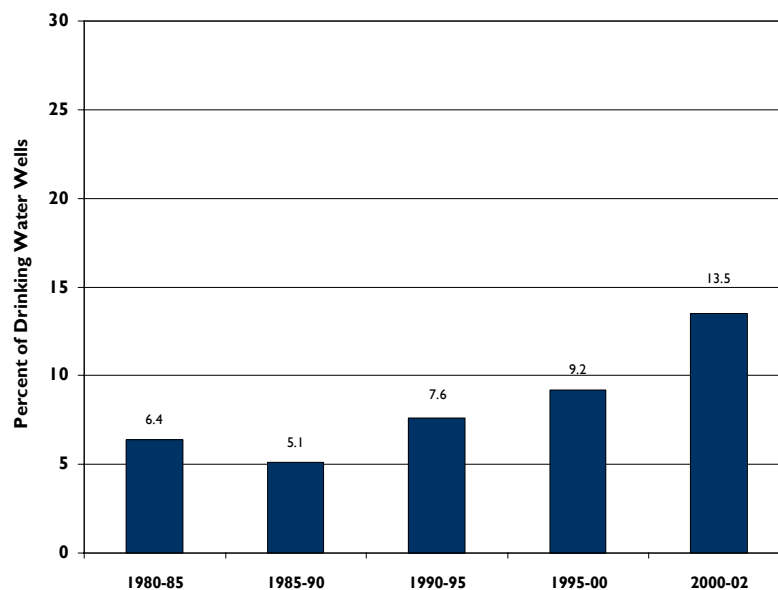


Figure 35: Percentage of Drinking Water Wells (Serving 25+ Persons) Exceeding Nitrate Standard (>45 mg/L), Central Coast Region*, 1980-2003

Source: Central Coast Regional Water Resource Control Board/CA Department of Health Services, 2005

*Regional data does not include Ventura County.

Due to the Central Coast's mild growing climate, there are multiple harvests and intense cultivation in some areas requiring heavy applications of fertilizers. Some outlying communities still rely on onsite disposal systems to treat human waste, increasing nitrate concentrations in underlying groundwater. A 1995 study of the groundwater basins in the Central Coast region (excluding Ventura County) identified 15 individual basins with significant nitrate contamination exceeding the drinking water standard of 45mg/L (as NO₃) (CRWQCB, 1995).

The California Department of Health Services (DHS) requires regular testing of drinking water supply wells that serve 25 or more individuals. Wells that persistently violate standards are typically removed from use as drinking water wells. In spite of this, DHS well data from the Central Coast shows a doubling of the rate of violations of the drinking water standard in the past twenty years to over 13 percent. (Figure 35). The Central Coast Ambient Monitoring Program (CCAMP), the surface water monitoring program for the Central Coast Water Board, shows equally alarming concentrations of nitrate in surface waters, reaching levels far in excess of drinking water standards in some water bodies (CCAMP, 2005).

Recreational water use

California's "Right to Know" law was enacted in 1997, ensuring that beaches with annual visitation of over 50,000 per year are monitored for bacterial contamination by county health departments from April through October for water safety. A *Beach Report Card* is issued by the nonprofit organization Heal the Bay, based on the routine monitoring of beaches conducted by local health agencies and dischargers. Water samples are analyzed for bacteria that indicate pollution from numerous sources, including fecal waste. The higher the grade a beach receives, the lower the risk of illness to ocean users. The report is not designed to measure the amount of trash or toxins found at beaches (Heal the Bay, 2005).

During dry weather in 2004-2005, most of the Central Coast's beaches received good or excellent scores, and several showed notable improvement over past years. (Figure 36). Like other beaches throughout the state, most Central Coast beaches had failing scores during the wet winter of 2004-05, resulting in beach postings. Failing scores can be attributed to the large amounts of urban and river runoff entering the ocean during high rainfall events. Along the five-county coastline, sewage spills resulted in four beach closures over the course of the year. Of the four, the two that reported spill volume totaled 6000 gallons of sewage (Heal the Bay, 2005).

Although creeks and rivers are not typically monitored by county health departments for swimming safety, they are often used recreationally, particularly by children. The Central Coast Ambient Monitoring Program has found fecal coliform levels routinely elevated in a number of the rivers and streams in the area (CCAMP, 2005). Of the 205 sites monitored by the program since 1998, 78 percent (typically those in urban and agricultural areas) have exceeded the Basin Plan standard for water body contact.

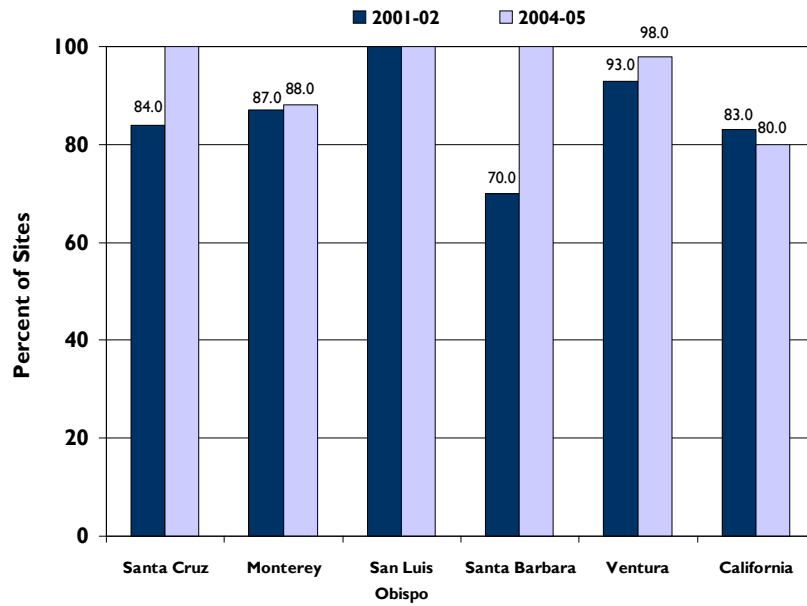


Figure 36: Percentage of Beach Monitoring Sites Receiving A or B Grade in Summer, Dry Months, Central Coast Region, 2001-02 and 2004-05
Source: Heal the Bay, Beach Report Card, 2005

D. AVAILABILITY OF HEALTH CARE SERVICES

Health Care Facilities

Hospitals

Central Coast hospitals are faced with enormous challenges. Inadequate payments from public and private payers; shortages of nurses, the costs of implementing nurse staffing standards; compliance with the 2008 seismic standards; and lack of capital all contribute to the declining viability of facilities. Hospital utilization and length of stay in the United States has been declining due to cost containment measures instituted by Medicare and Medicaid (Medi-Cal) programs, other payers, and employers, as well as to scientific and technological advances that allowed a shift in services from hospitals to ambulatory outpatient settings, the community, home, and nursing homes (Bernstein, 2003).

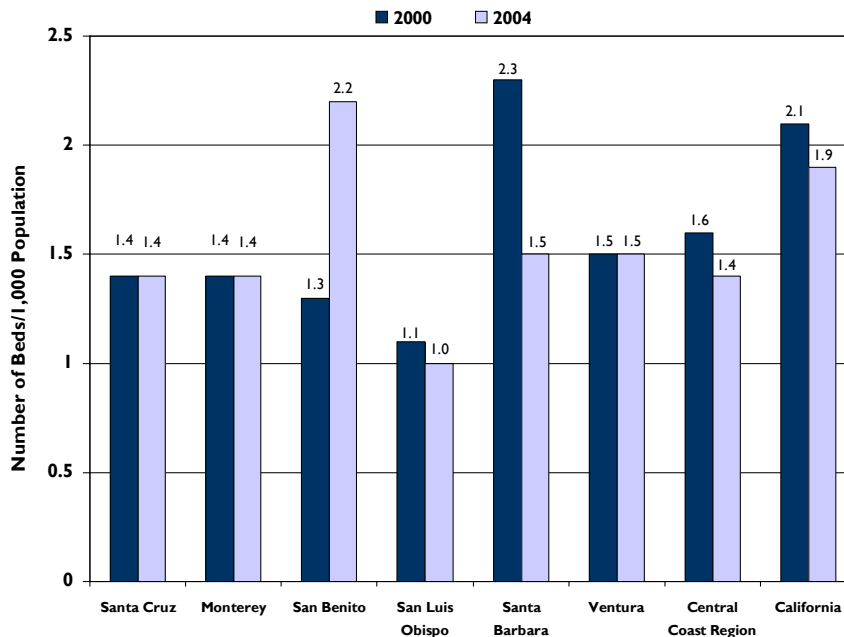


Figure 37: Number of Staffed Hospital Beds per 1,000 Population, Central Coast Region, 2000-2004

Source: CA OSHPD, 2005; CA Department of Finance, 2005

The Central Coast had fewer staffed hospital beds per capita than did California as a whole in 2004. The region has also lost hospital beds at a faster rate than California. In 2004, there were 3,222 hospital beds in the Central Coast, down from 3,411 beds in 2000, a decrease of 5.9 percent. California experienced a drop in staffed hospital beds of only 1.6 percent. The ratio of beds per 1,000 persons in the region was 1.4 beds, compared to California's rate of 1.9 beds per 1,000 persons in 2004. (Figure 37).

Long Term Care

Nursing homes traditionally provide two types of care: chronic care for the frail elderly and short-term sub-acute care for persons recuperating from a hospitalization or an acute condition. Long-term care is primarily financed by the Medi-Cal program, with Medicare paying only a small portion of the cost of care in skilled nursing facilities. Private insurance for care in skilled nursing facilities is not extensively used. As the Medi-Cal program is a means-determined program, the elderly and persons with disabilities receive Medi-Cal coverage only if they are of very low income and have few assets.

The Central Coast region has fewer nursing home beds than California as a whole, even though it has a larger and growing percentage of elderly residents than California. The number of available skilled nursing facility beds per 1,000 persons in the Central Coast dropped slightly between 2000 and 2004, from 2.7 to 2.4. During the same period, California's rate dropped from 3.4 to 3.2. (Figure 38). Conversely, the senior population over 65 years increased approximately 10 percent during from 2000 to 2005, and is projected to grow by another 10 percent by 2010.

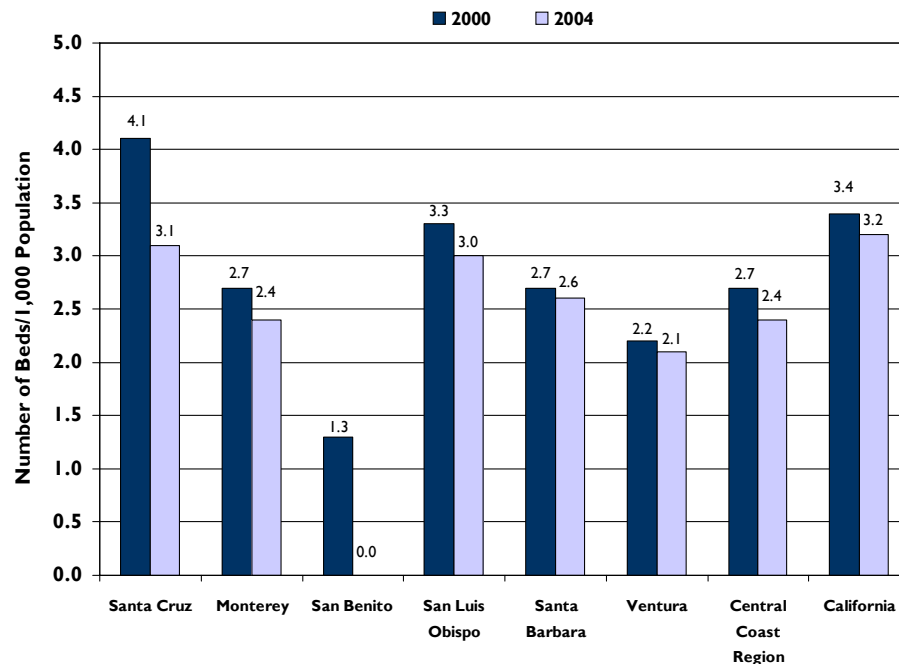


Figure 38: Number of Skilled Nursing Long-Term Care Facility Beds per 1,000 Population, Central Coast Region, 2000-2004

Source: CA OSHPD, 2005; CA Department of Finance, 2005

Community Clinics

Community clinics and health centers in California provide health care services to many underserved populations: the uninsured, the homeless, rural and migrant families, women and children, and the working poor. Clinics have various designations such as rural health clinic, migrant health clinic, federally qualified health center, and Indian health clinic. State data show that in 2004 there were 49

licensed community and free clinics in the Central Coast, down from 54 clinics in 2000 (CA OSHPD, 2005). (Figure 39). However, not all clinics need to be licensed, e.g. county and Indian clinics are not required to be licensed by the State. (A list of the free and community clinics reported to CA OSHPD is in Appendix III.)

Clinics are an important source of health care in the Central Coast. In 2004, the clinics reported seeing over 218,875 patients with a total of 723,608 encounters (CA OSHPD, 2005). Also, one out of five Central Coast residents (19.5%) reported that a clinic was their usual source of care (2001, 2003 CHIS).

Unlike most areas of the State, there is no community clinic regional consortium or network in the Central Coast. These consortia elsewhere in California provide for networking opportunities, shared information, marketing, infrastructure and fund development. Several foundations and the federal government have made community clinics a high priority in funding, and regional approaches in seeking support might be beneficial. Also, some counties in the Central Coast have been adapting their primary care delivery systems to develop partnerships between the county and community clinics.

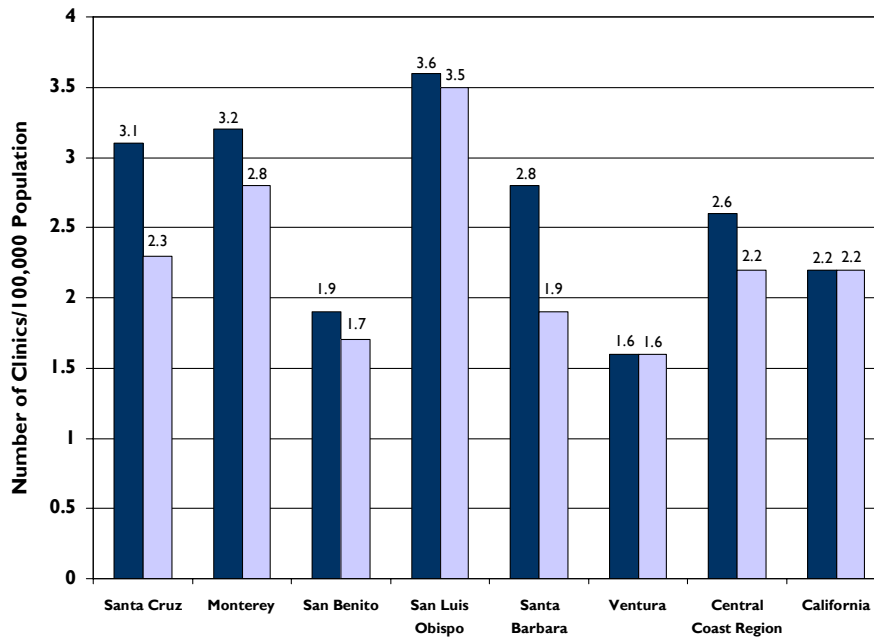


Figure 39: Number of Free and Community Clinics per 100,000 Population, Central Coast Region, 2001-2004

Source: CA OSHPD, 2005

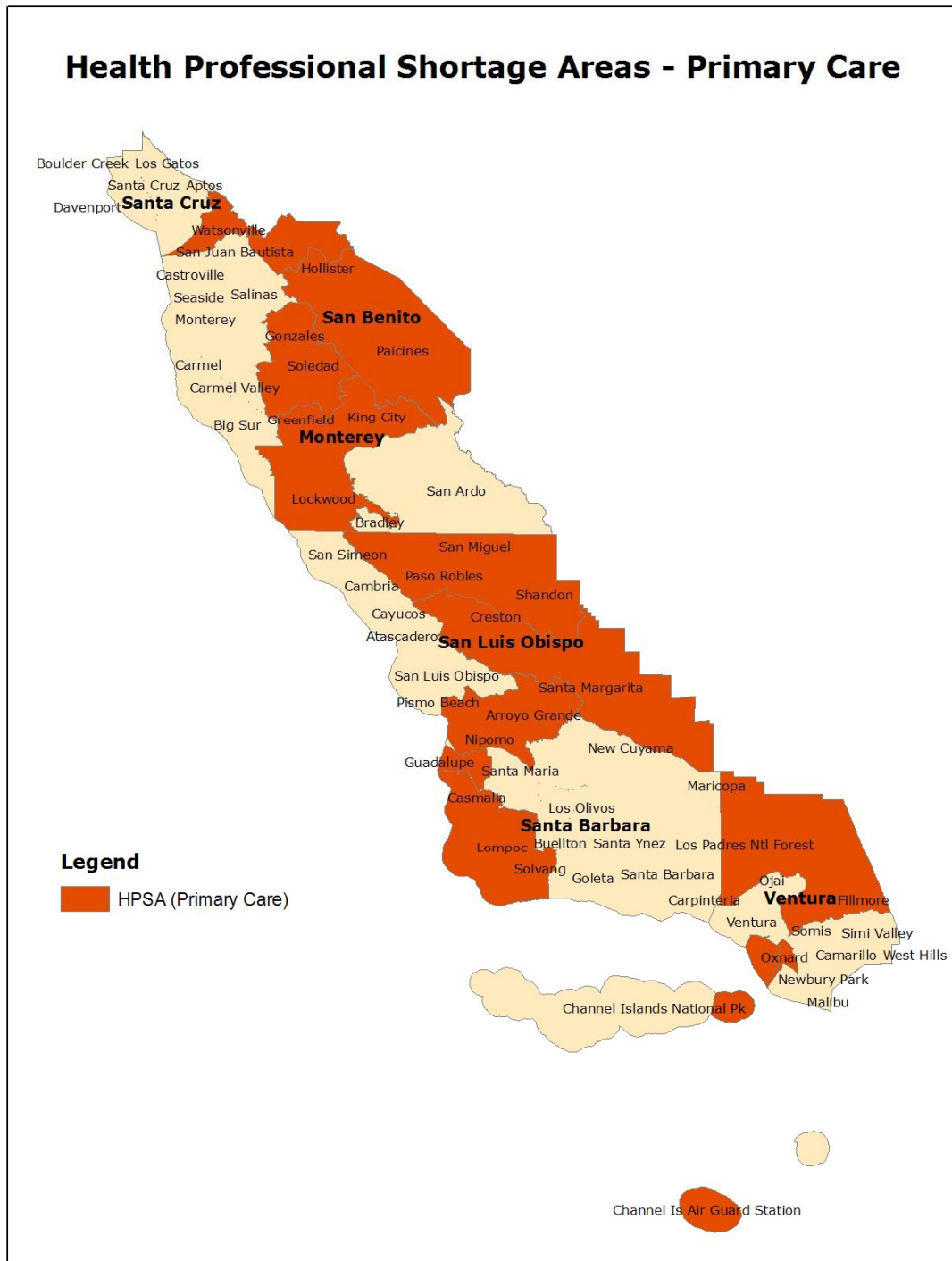


Figure 40: Designated Health Professional Shortage Areas, Primary Care, Central Coast Region, 2005

Source: U.S. Department of Health and Human Services, 2005

Health Providers

Physicians

For the past several years there has been considerable discussion about a shortage of physicians on the Central Coast, as well as a rising departure of physicians from the area. In recognition of this lack of physicians, nearly half of the Central Coast has been designated as a Health Professional Shortage Area (HPSA) for primary care physicians by the federal government. (Figure 40).

The ratio of physicians to population for both general practice physicians, as well as specialists, was higher in several Central Coast counties than in California in 2002. However, having a higher ratio of physicians than other areas of the State does not necessarily mean that there are sufficient physicians. Also, while the entire county may have higher rates of providers, these physicians are generally clustered in the more urbanized areas, leaving the more rural areas with a shortage of physicians. Furthermore, not all physicians are available to the entire population. Few physicians accept state health care programs, such as Medi-Cal where reimbursement rates are very low, and many work for state institutions (e.g., prisons, state hospitals) and are not in private practice.

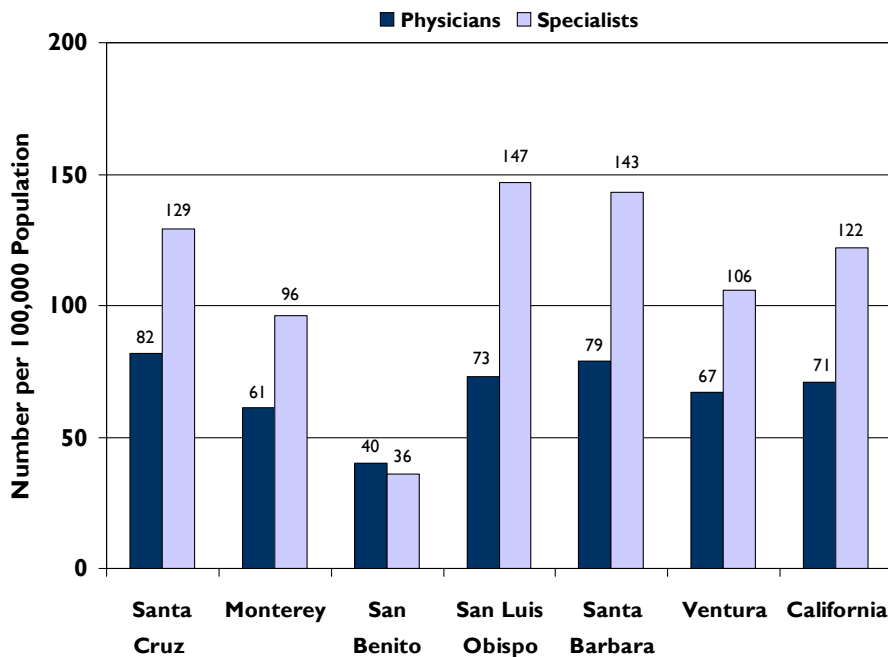


Figure 41: Number of Primary Care Physicians and Specialists per 100,000 Population, Central Coast Region, 2002

Source: Center for Health Workforce Studies, 2004

The ratio of physicians to population varies widely throughout the Central Coast counties. For primary care physicians, rates of physicians per 100,000 population ranged from 40 in San Benito to 82 in Santa Cruz. For specialists, San Luis Obispo had the highest rate and San Benito, again, had the lowest rate. In comparison, California had 71 primary care physicians and 122 specialists per 100,000 population, while

Los Angeles County had 70 primary care providers and San Francisco County had 150 primary providers per 100,000 residents. (Figure 41).

Nursing

The statewide nursing shortage is evident in the Central Coast. The number of registered nurses per 100,000 persons was lower in the region than in California as a whole. In 2005, there were 814 registered nurses per 100,000 population in California, while the Central Coast had 778. Santa Cruz and San Luis Obispo counties had far more than the state average, 921 and 984, respectively, while San Benito, Monterey and Santa Barbara were below the state ratio (484, 604, and 649, respectively). (Figure 42).

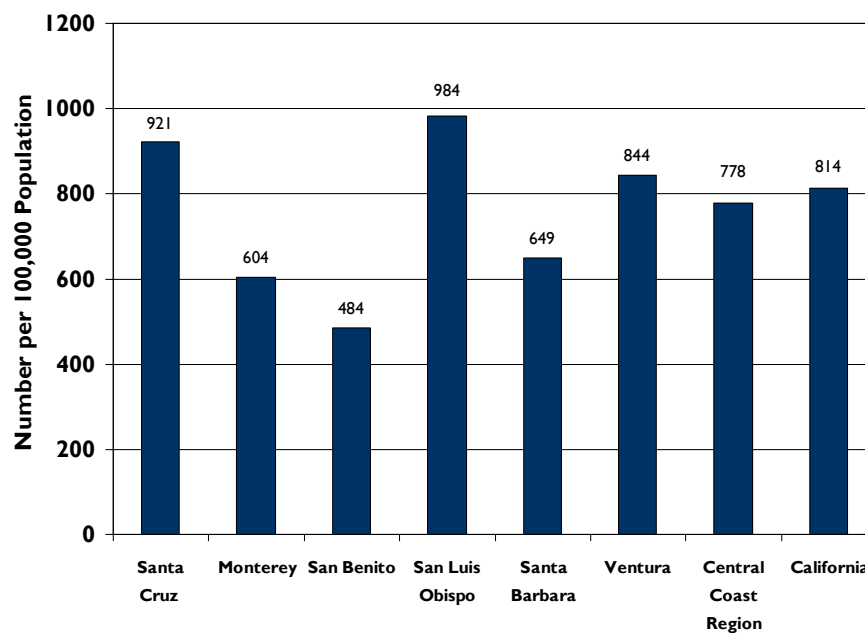


Figure 42: Number of Registered Nurses per 100,000 Population, Central Coast Region, 2005
Source: CA Board of Registered Nursing, 2005

Dental Health Professionals

The Central Coast population in 2002 had slightly fewer dentists compared to the state as a whole, but much fewer than the Greater Bay Area. There were 76 full-time equivalent dentists per 100,000 population in California and 70 in the Central Coast. By comparison, the Greater Bay area had 100 and Los Angeles has 76 dentists per 100,000 population (Pourat, 2005). (Figure 44). Furthermore, as in the rest of the state, not all dentists treat all patients. Medi-Cal patients and low income persons without coverage report difficulty finding providers. Also many general dentists do not treat young children, creating a shortage of dentists for parents seeking care for their children.

Despite the Central Coast's lower dentist population rate, relatively few geographic areas in the Central Coast have been designated as a Dental Health Professional Shortage Area by the federal government. (Figure 43).

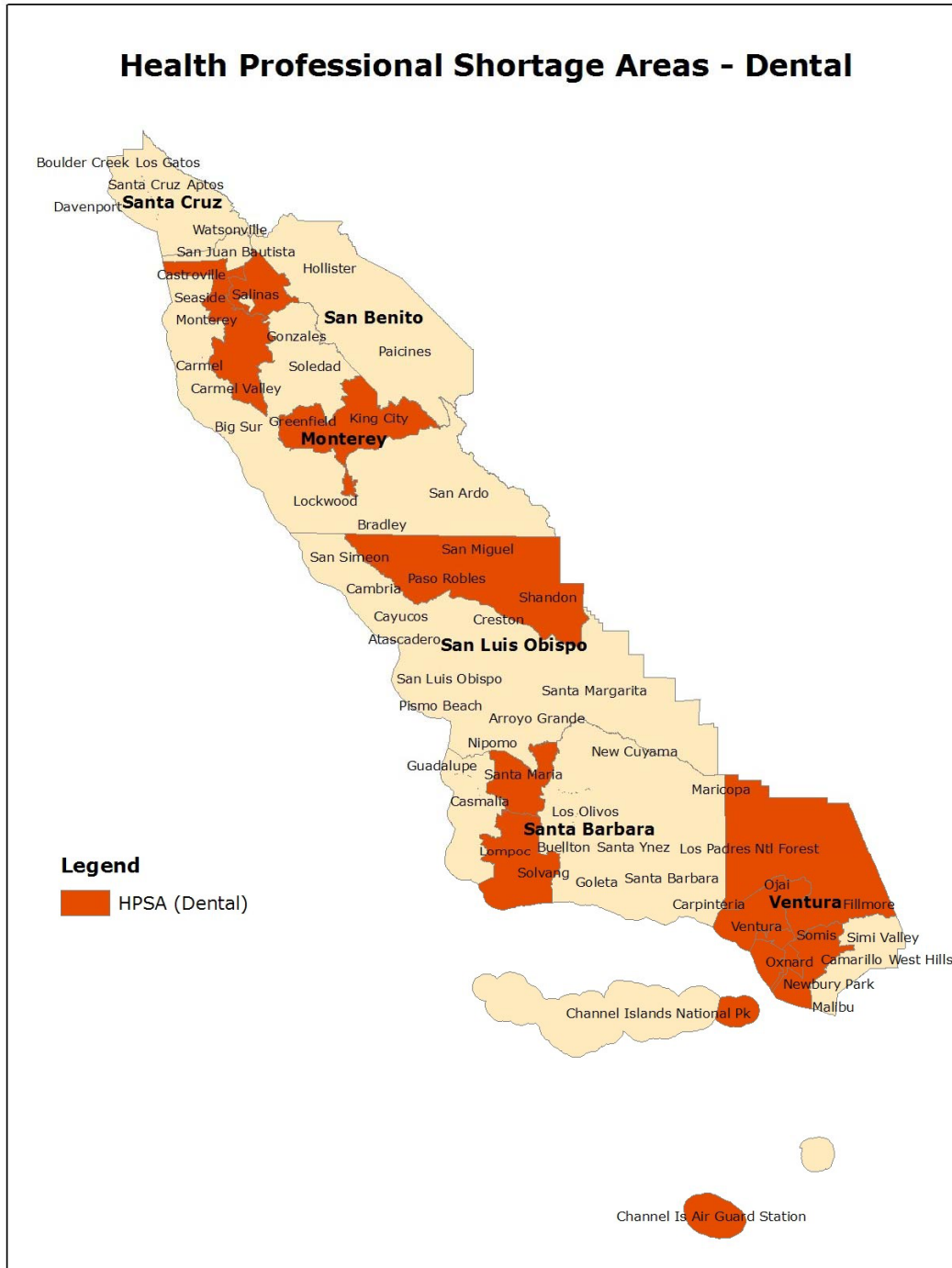


Figure 43: Designated Health Professional Shortage Areas, Dental Health, Central Coast Region, 2005

Source: U.S. Department of Health and Human Services, 2005

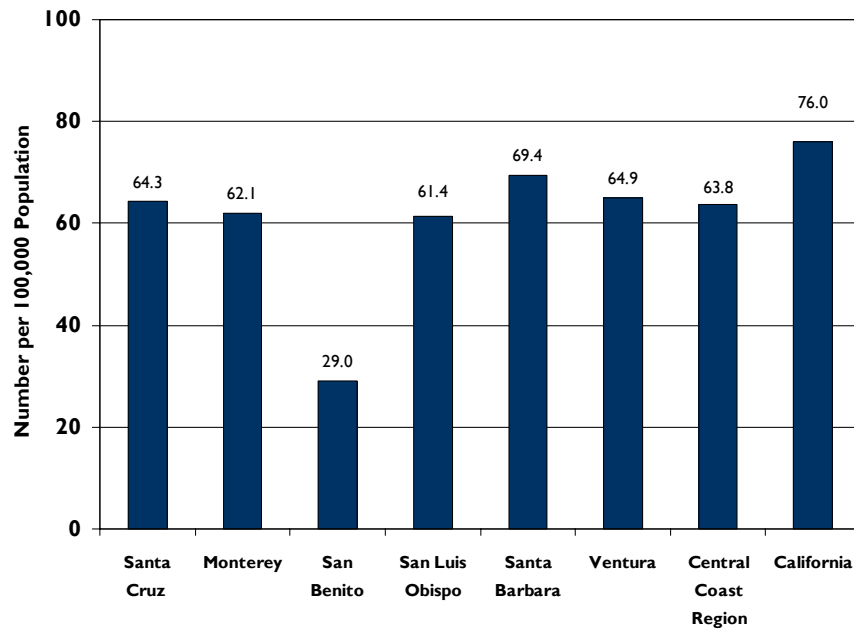


Figure 44: Number of Dentists per 100,000 Population, Central Coast Region, 2002

Source: Pourat, 2005

Mental Health Professionals

The Surgeon General’s report on mental health care in the United States indicated that about 20 percent of the American population experiences a diagnosable mental health condition each year (U.S. Department of Health and Human Services, 1999). The Surgeon General’s report also estimated that as few as one-third received the treatment they needed. Among the reasons for not receiving care were the cost of mental health services, the stigma associated with mental health problems, and low access to providers. Availability of mental health providers is one barrier to accessing necessary care (*Healthy People 2010*, 2000).

The Central Coast region has major gaps in mental health providers. Every county has fewer psychiatrists than the state as a whole. In 2001, the state ratio was 14 psychiatrists per 100,000, and the regional average was 8 per 100,000 population. And, not all practicing psychiatrists are available to the general public – many are employed by government institutions and only serve those patients. Also, while the Central Coast had approximately the same rate of psychologists as the rest of the state, there were wide disparities between the counties. For example, San Luis Obispo County had 58 psychologists per 100,000 population (perhaps driven by a large state mental hospital); neighboring Monterey County had only 19 psychologists per 100,000 population. The California per population rate was 32 per 100,000 population. (Figure 45).

On the other hand, the regional ratio of licensed marriage and family therapists (103 per 100,000) is over double the state rate (42 per 100,000). The regional ratio of licensed clinical social workers is similar to the state rate. (Figure 46).

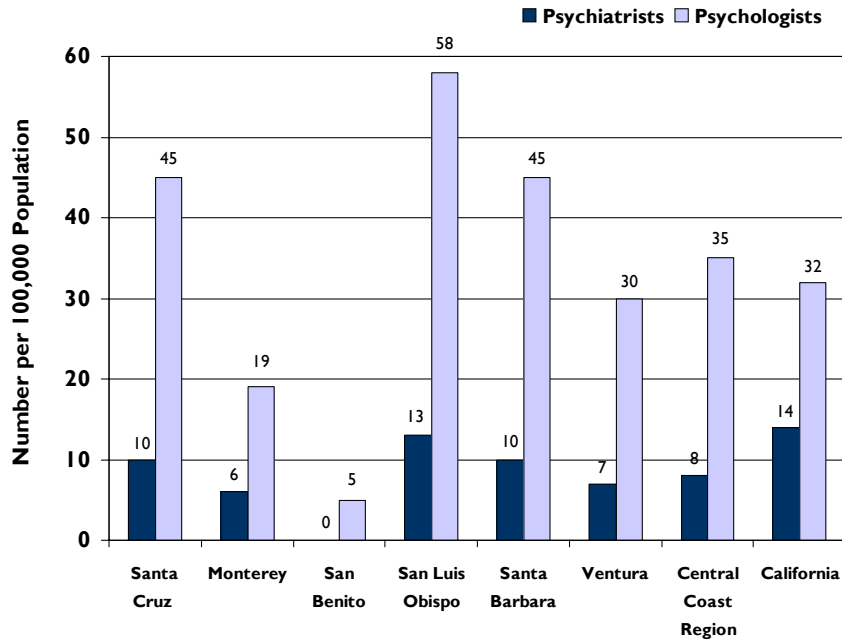


Figure 45: Number of Psychiatrists and Psychologists per 100,000 Population, Central Coast Region, 2001

Source: McRee, 2003

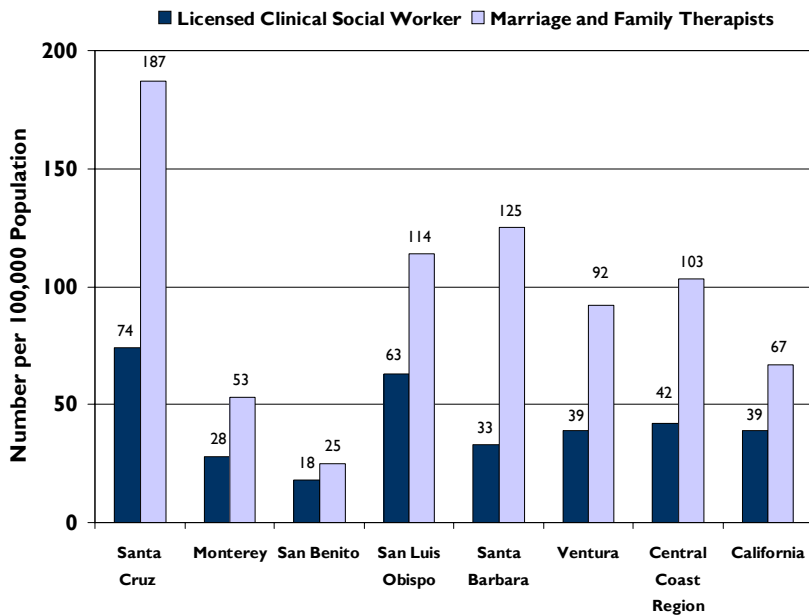


Figure 46: Number of Marriage and Family Therapists and Licensed Clinical Social Workers per 100,000 Population, Central Coast Region, 2001

Source: McRee, 2003

E. PAYING FOR HEALTH CARE

Total spending on health exceeded \$1.9 trillion nationally, or 16 percent of the nation’s gross domestic product in 2004. The overall cost of health care doubled between 1993 and 2004. In 2004, per capita health spending in the United States exceeded \$6,280 per year, up from \$5,670 in 2003. The rate of growth in health spending from 2003 to 2004 was lower than in previous years, but nonetheless it exceeded the rates of inflation and wage growth in the same time period (Smith, 2006).

In 2004, public funding accounted for 45.0 percent of spending for personal health care, private health insurance accounted for 35.0 percent of expenditures, consumer out-of-pocket expenditures accounted for 12.6 percent, and the remaining 7.2 percent came from other private sources such as philanthropy (Smith, 2006).

Insurance Coverage

Health insurance is an important factor in accessing quality health care. Research reviewed in the *Healthy People 2010* report showed that persons with health insurance were more likely to have a primary care provider and to have received appropriate preventive care such as a recent Pap test, immunization, mammogram, or early prenatal care. Adults with health insurance were twice as likely to receive a routine checkup as were adults without health insurance (*Healthy People 2010*, 2000).

According to a recent U.S. Census report, the number of people in the United States without health insurance increased between 2003 and 2004, from 45.0 to 45.8 million people. Approximately 25 percent of households with incomes below \$25,000 had no health insurance in 2004; 32.7 percent of Latinos were uninsured in 2004; the highest of any racial or ethnic group (DeNavas-Walt, 2005).

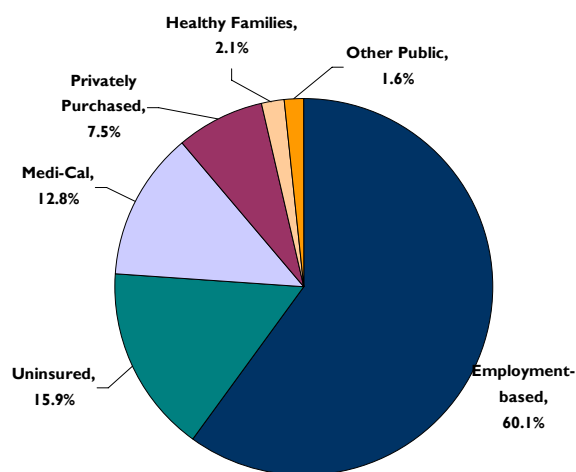


Figure 47: Percentage of Residents, 0-64 Years, by Source of Current Health Insurance Coverage, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

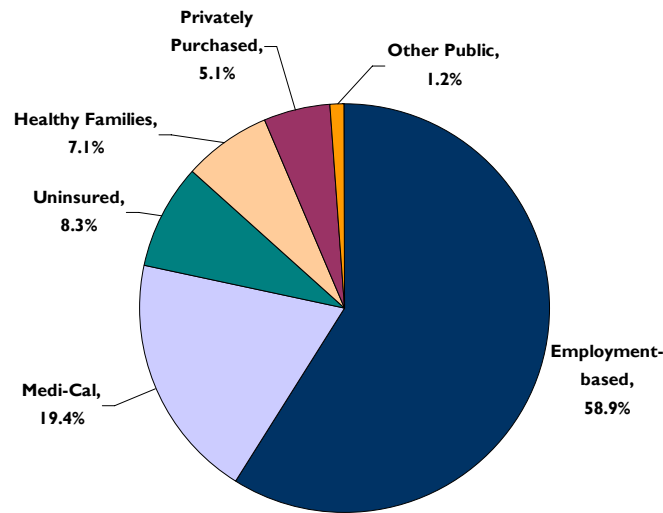


Figure 48: Percentage of Children, 0-18 Years, by Source of Current Health Insurance Coverage, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Uninsured

CHIS reported that one out of six (15.9%) of the Central Coast’s non-elderly residents (0-64 years) had no health insurance at the time of the surveys. (Figure 47). This includes 8.3 percent of children with no health insurance. (Figure 48). Moreover, 21.8 percent of the non-elderly population had no insurance at some point in the past year.

These numbers are on a par with California, where 15.9 percent of residents reported that they lacked health insurance at the time of the CHIS surveys. California has the eighth highest rate of uninsured in the United States, more than all states except Florida, Louisiana, Montana, Nevada, New Mexico, Oklahoma, and Texas (Kaiser Commission, 2005). The percentage of children without health insurance in the Central Coast region was also approximately the same as the state rate of 8.2 percent.

Latino residents in the Central Coast were more than three times as likely as white residents to be uninsured (28% of Latinos and 8.8% of whites). Lower income residents were more than four times as likely as higher income residents to have no insurance (29.2% of non-elderly residents with annual incomes under the Federal Poverty Level [FPL] and 6.6% of non-elderly residents with annual incomes over 300% of the FPL). Non-citizen immigrants were also four times more likely than native born to be uninsured (41.2% of non-citizens and 10.4% of U.S.-born residents). (Figure 49).

Among children in the Central Coast, the disparities in insurance along ethnic, income and immigration lines were much greater than for the non-elderly population. Latino children were more than four times as likely to be uninsured than whites (14.4% of Latino children and 3.3% of white children). Low-income children were more than six times more likely to have no insurance than higher income children (14.9% of children under 100% of FPL and 2.3% of children over 300% of FPL). And, non-

citizen immigrant children were four times more likely to be uninsured than U.S.-born children (41.2% of non-citizen immigrants and 10.4% of U.S.-born). (Figure 50).

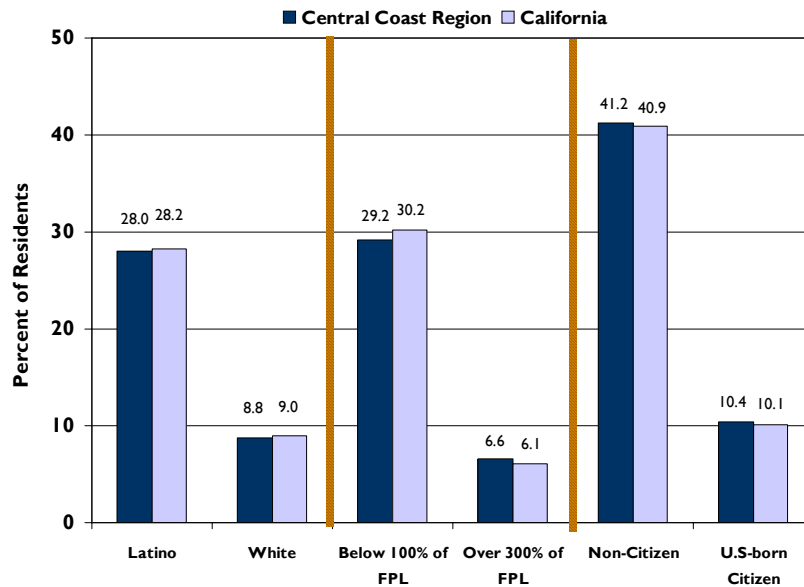


Figure 49: Percentage of Uninsured Residents, 0-64 Years, by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

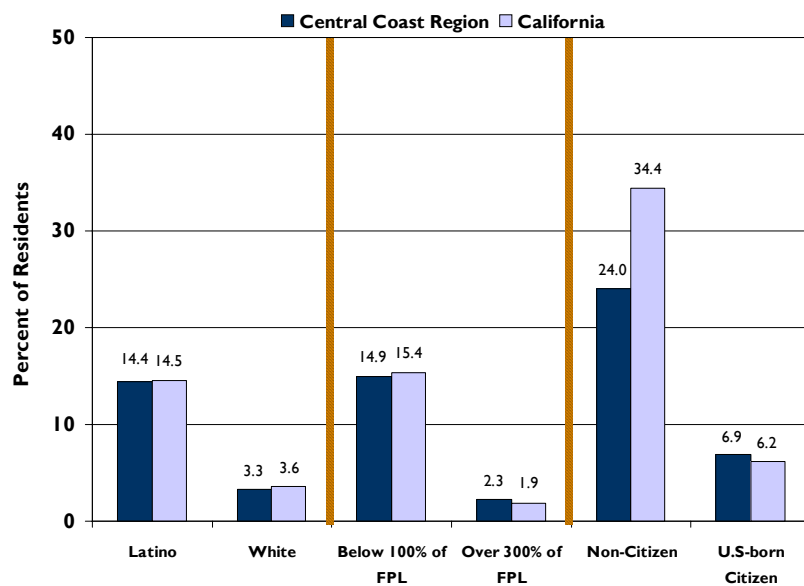


Figure 50: Percentage of Uninsured Children, 0-18 Years, by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Privately Insured

Six out of ten (60.1%) non-elderly persons in the Central Coast had employment-based insurance, comparable to the California rate of 59.4 percent. The percentage of persons with employment-based insurance varied in the Central Coast, from 56.7 percent in Santa Barbara County to more than 60 percent in Ventura and Santa Cruz County. An additional 7.5 percent of Central Coast non-elderly residents reported that they purchased their own private health insurance, higher than the state rate of 5.8 percent.

The cost of private insurance makes it unattainable for some persons. A recent survey of insurance costs show that for a family of four with a 35 year-old parent, standard HMO products ranged from \$933 per month in Santa Barbara and Ventura Counties to \$1276 per month in San Benito County. A less expensive preferred provider organization (PPO) product ranged from \$541 per month in Santa Barbara and Ventura Counties to \$663 in Monterey County (ITUP, 2005). At \$541 per month, a PPO plan would cost approximately 10 percent of the region’s median family income of \$66,237; a \$933 monthly HMO premium would amount to approximately 17 percent of the median family income. Since lower income families are much less likely to have employer-supplied insurance, the burden of purchasing coverage is even greater.

Medi-Cal

Central Coast non-elderly residents were slightly less likely to be enrolled in Medi-Cal than Californians (12.8% of Central Coast residents and 15.4% of Californians) (2001, 2003 CHIS). Administrative Medi-Cal data show that 302,000 persons in the Central Coast were enrolled in Medi-Cal in 2003-2004 (CA Department of Health Services, 2005c).

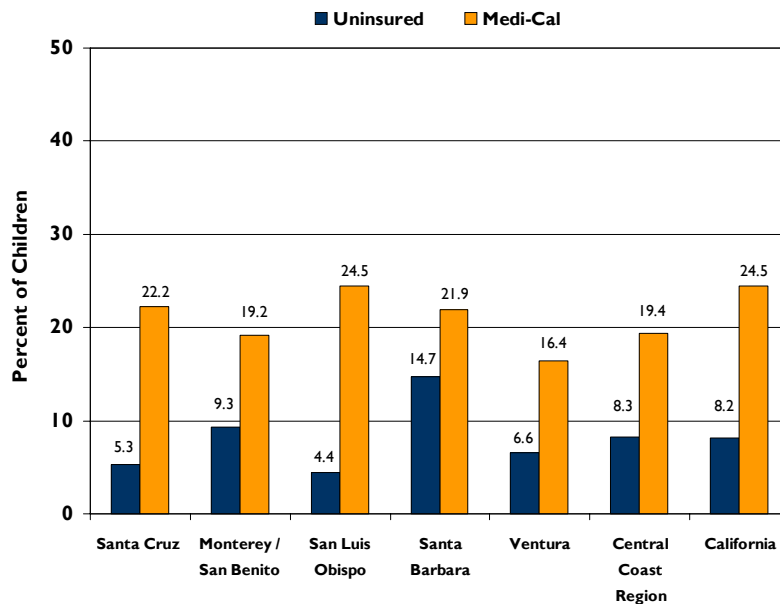


Figure 51: Percentage of Children, 0-18 years, Uninsured and Enrolled in Medi-Cal, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

One in five (19.4%) of Central Coast children were enrolled in Medi-Cal, compared to 24.5 percent of California children. (Figure 51). Yet, Medi-Cal paid for prenatal care for nearly half of the births (48.3%) on the Central Coast in 2004, slightly higher than the state rate of 44.8 percent (CA Department of Health Services, 2005b).

Healthy Families

The Healthy Families program has provided a major expansion of health coverage for children in working class families. Children from households with an income below 250 percent of the federal poverty level and not eligible for the Medi-Cal program can qualify for full health insurance coverage with minimal premiums and co-payments. As of May 2005, approximately 50,000 Central Coast children (7.9%) had enrolled in the Healthy Families program (MRMIB, 2005). This is somewhat greater than the percentage for California, where 6.9 percent of children were enrolled in the program across the state.

Retaining children in the program has been difficult. From June 2004 to May 2005, 50,292 Central Coast children were enrolled in the program, but 54,637 children were disenrolled during the same period. In other words, the number of children disenrolled from Healthy Families exceeded the number of children enrolled (MRMIB, May 2005). (Figure 52).

Few data exist on reasons for the high disenrollment, The Managed Risk Medical Insurance Board (MRMIB) reported that in 2003 one out of six disenrollments was for unavoidable reasons (aging out, other coverage, etc.) and that five out of six disenrollments were for possibly unavoidable reasons. Forty-four percent of the possibly unavoidable disenrollments were due to nonpayment of premiums and the remainder was for failure to complete renewal paperwork (MRMIB, 2005).

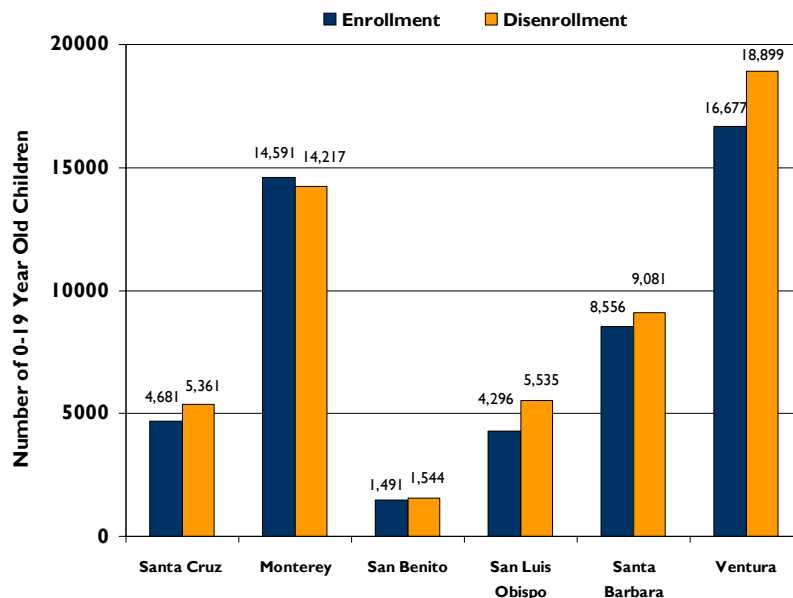


Figure 52: Number of Children Currently Enrolled and Disenrolled in Healthy Families Program, Central Coast Region, June 2004-May 2005

Source: CA Managed Risk Medical Insurance Board, 2005

Healthy Kids

Several Central Coast counties have begun programs to extend comprehensive health insurance (medical, dental and vision) to all children under 300% of the federal poverty level. These children's health initiatives engage in outreach and enrollment to sign up all children eligible for existing programs (e.g. Medi-Cal and Healthy Families). For those that are not eligible either due to income or immigration status, the community initiatives provide coverage through a local product called Healthy Kids. In the spring of 2006, 1815 children in Santa Cruz County, 520 children in San Luis Obispo County and 320 in Santa Barbara County were covered in this program.

Medicare

Medicare covers nearly all elderly persons (65 years of age and older) in the Central Coast and a significant number of persons with disabilities. There were approximately 250,000 Medicare recipients in the Central Coast in 2003. The Medicare program is extremely important to health care providers and its reimbursement rates serve as the basis for the rates of many private health plans (Wallace, 2003).

Almost all Coast residents, age 65 and older, who are enrolled in the Medicare program have at least one other type of health coverage. Three-quarters (76.2%) of Coast seniors had Medicare and additional supplementary private insurance. Only a small percentage (6.9%) had only Medicare coverage (Wallace, 2003).

The recent implementation of Medicare Part D for prescription drug coverage is a major change in Medicare coverage. However, it has been fraught with implementation problems and it is much too early to evaluate its effectiveness.

Dental Coverage

The percentage of Central Coast residents without dental insurance is much higher than those without medical insurance. For adults, 36.9 percent did not have dental insurance; 15.2 percent of children do not have dental coverage, nearly twice the percentage of those without medical insurance (8.3%). (Figure 53). The lowest income and the highest income adults were the most likely to have dental coverage (65.3 under FPL and 69.4% over 300% FPL), while lower income adults were less likely to have dental insurance (54.2% of those between 100 and 199% FPL and 48.5% of those between 200 and 299% FPL). (Figure 54).

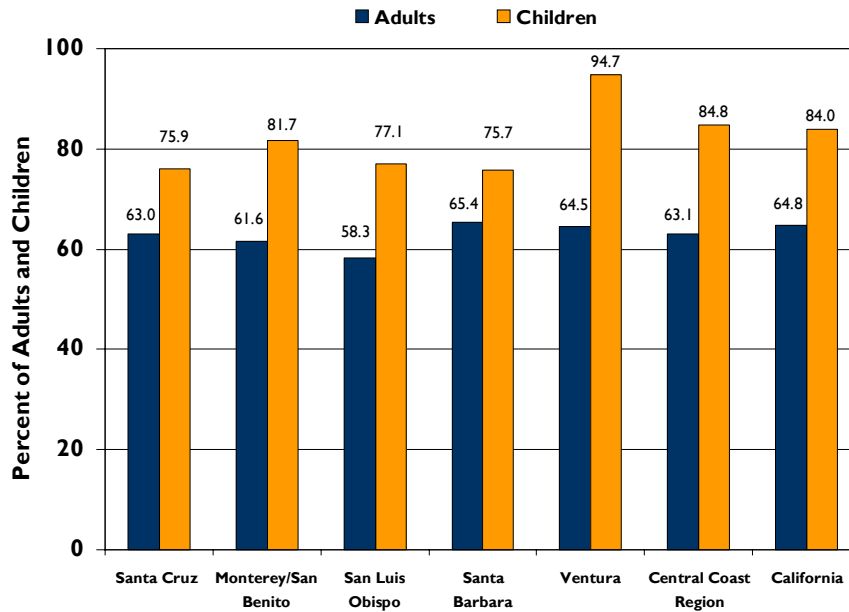


Figure 53: Percentages of Adults and Children, 2-18 Years, With Dental Insurance Coverage, Central Coast Region, 2003

Source: 2003 CHIS; UCLA Center for Health Policy Research, 2005

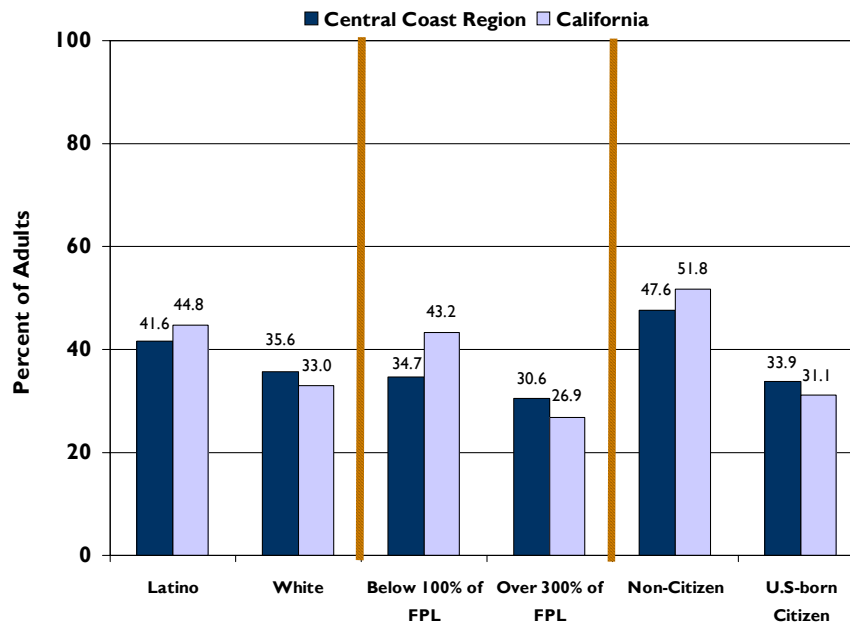


Figure 54: Percentage of Adults Without Dental Insurance by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2003

Source: 2003 CHIS; UCLA Center for Health Policy Research, 2005

Fiscal Impact of the Uninsured

The lack of insurance has a severe financial impact on families who cannot obtain care or pay medical bills. Illness and medical bills caused half of the 1,458,000 personal bankruptcies in 2001 (Himmelstein, 2005). Health care providers also feel the impact of patients who cannot afford the care.

Hospitals on the Central Coast reported over \$67 million in 2002-2003 for bad debt and charity care. This amounted to 2.7 percent of net patient revenue. The uninsured and county indigent patients accounted for 1.1 percent of hospital inpatient admissions; 5.2 percent of admissions were categorized as “other” which includes additional uninsured and self-pay patients. Similarly, hospital emergency departments reported that 1.3 percent of cases were uninsured or county indigent patients, while 13.3 percent were categorized as “other” (ITUP, 2005). (Figure 55).

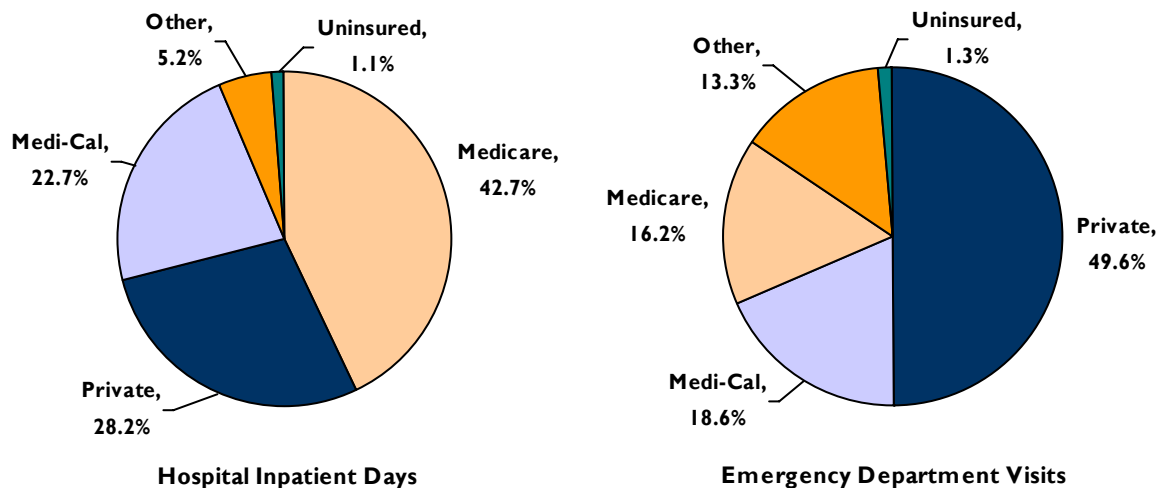


Figure 55: Percentage of Hospital Inpatient Days and of Emergency Department Visits Utilized by Source of Payment, Central Coast Region, Fiscal Year 2002-2003
Source: ITUP, 2005

County Funding

While the state and federal governments are major sources of health care funding, local county governments are also responsible for a large share of funding for public health and health care services. Depending on the types of county services (e.g., county hospital or clinics), county expenditures may differ dramatically.

In fiscal year 2003-2004, local government on the Central Coast received approximately \$114 million from the State in health care funding from sources such as realignment, Proposition 99, county match, tobacco settlement and net county disproportionate share hospital (DSH) funds. Approximately 38.8 percent of total funding was spent on the uninsured (ITUP, 2005).

A source of potential funding for health programs is the annual payments from the *Tobacco Litigation Master Settlement Agreement*. These funds are paid to the state and the counties in settlement of a

national tobacco lawsuit. Half of the payment goes to the state's General Fund, with the legislature and governor determining how the money will be used. The remainder is divided, based on population, among California's 58 counties and four largest cities for use as decided by each local government (CA Department of Justice, 2005).

Funding from the *Tobacco Litigation Master Settlement Agreement* provided \$22.5 million in 2005 to the Central Coast counties. However, not all counties have spent the funds on health care. Ventura and San Luis Obispo Counties spend all of their funds on health issues according to formulas adopted by the voters in county referenda. The Santa Barbara County Board of Supervisors distributes all its funds on health issues according to recommendation from an advisory committee. (Figure 56).

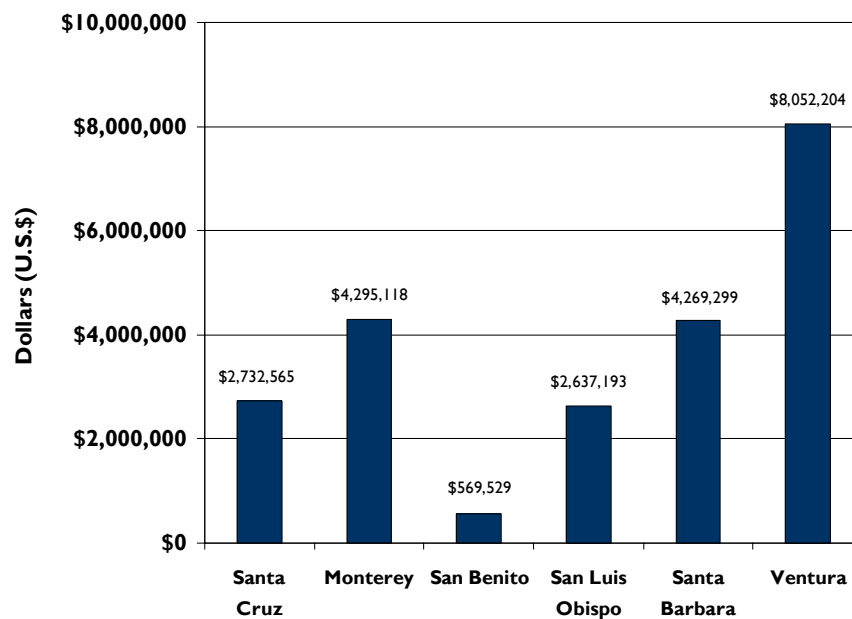


Figure 56: Funds Distributed Through Tobacco Litigation Master Settlement Agreement, Central Coast Region, 2005

Source: CA Department of Justice, 2005

Another source of potential funding for health services for children below five years of age is Proposition 10, the California Children and Families Act of 1998. The act is designed to provide all children from prenatal to five years of age, on a community-by-community basis, with a comprehensive, integrated system of early childhood development services. Funds obtained through a tobacco tax are allocated to counties based upon their birth rates (Inkelas, 2003).

In fiscal year 2004 Central Coast counties received nearly \$27 million to distribute for children under 5 years of age and their families. (Figure 57). Each county has its own "First 5" commission, which includes a county health officer; representatives of local medical, pediatric or obstetric communities; representatives of local school districts; and a member of the county board of supervisors. Funds have been distributed for a wide range of programs to improve childhood development, including health services for both prevention and treatment. Several counties (Santa Cruz, San Luis Obispo and Santa

Barbara) have funded Healthy Kids insurance coverage programs for children, and Ventura is exploring opportunities.

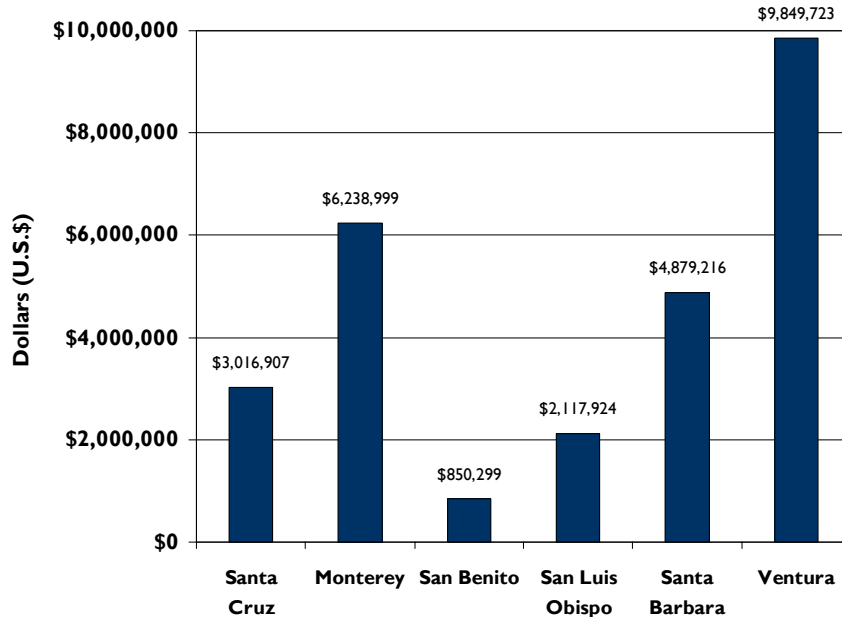


Figure 57: Funds Distributed Through Proposition 10: California Children and Families Act, Central Coast Region, Fiscal Year 2003-2004
 Source: CA Children and Families Commission, 2005

Philanthropy

Private foundations have become a major source of health funding in the Central Coast, although such funding per capita still falls short of philanthropic support in major urban areas such as the Bay Area. With the establishment of several large California health foundations in the past ten years, many programs have been started and sustained. Nonprofits have come to rely on foundation funding for their operations and programs, particularly as public funding is diminishing. The long-term sustainability of these programs is of concern to foundations.

Over the past 3 years, three of the State’s major foundations with large health portfolios spent nearly \$25 million on the Central Coast. Other regional and community foundations such as the Pajaro Valley Health Trust have also invested in health. The California Endowment (TCE) has been a major source of health funding in the Central Coast in recent years. From 2002 to 2005, TCE reported funding grants of approximately \$20 million; The California Wellness Foundation reported funding in then amount of \$3.9 million, while the David and Lucile Packard Foundation provided approximately \$800,000 in grants. Data from the California HealthCare Foundation were not available.



THE HEALTH STATUS OF CENTRAL COAST RESIDENTS

Health status can be measured by a number of indicators. Commonly used indicators include birth and death rates, life expectancy, quality of life, morbidity from specific diseases, risk factors, use of ambulatory care and inpatient care, accessibility of health personnel and facilities, financing of health care, and health insurance coverage. A variety of sources can be used to collect information on health status, including birth and death records; hospital discharge data, health care records, personal interviews, physical examinations, and telephone surveys (*Healthy People 2010*, 2000). Presented below are indicators of people's perceptions of their own health, as well as maternal and child health indicators, death rates, and other disease rates. As noted in the methodology section, the main sources of data used in this report are the California Health Interview Surveys and the California Department of Health Services' *County Health Status Profiles* and birth certificate data.

A. PERCEPTIONS OF HEALTH

The California Health Interview Surveys asked respondents, 0-64 years old, how they perceive their general health status. Central Coast residents rated their health very much like Californians as a whole. While 57 percent of the region's residents rated their health as "excellent" or "very good," only 50 percent of residents in Monterey and San Benito counties rated their health in that category. (Figure 58).

Latinos were three times as likely as whites to rate their health as "fair" or "poor" (26.9% of Latinos and 8.3% of whites). Similarly, lower income persons were more than four times as likely to rate their health as fair or poor than higher income persons (29.6% of persons under 100% of FPL and 7.1% of persons over 300% of FPL). Non-citizens were also more than three times as likely as U.S. born persons to rate their health as fair or poor (35.3% of non-citizens and 10.4% of U.S.-born citizens). (Figure 59).

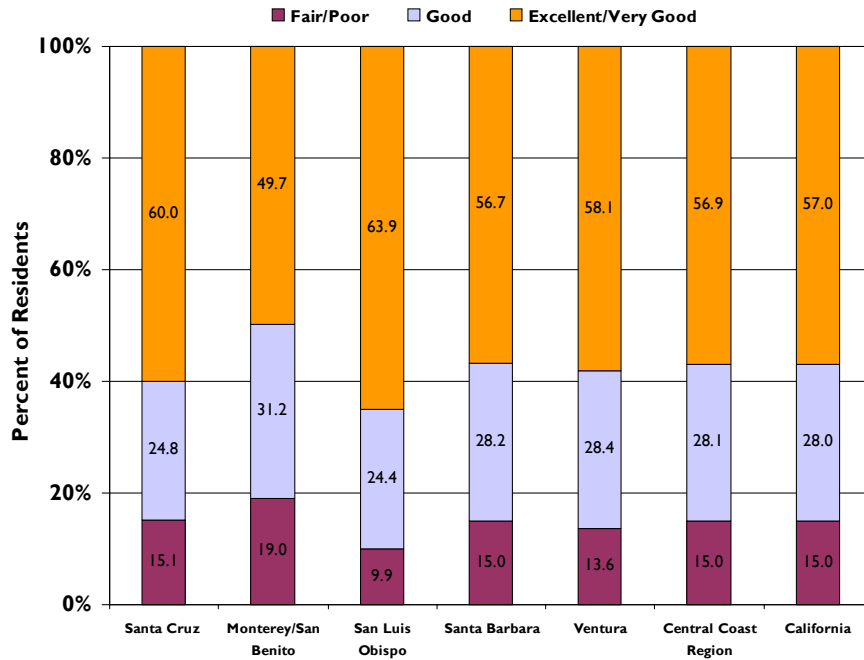


Figure 58: Percentage of Residents, 0-64 Years, by How They Perceived Their Health Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

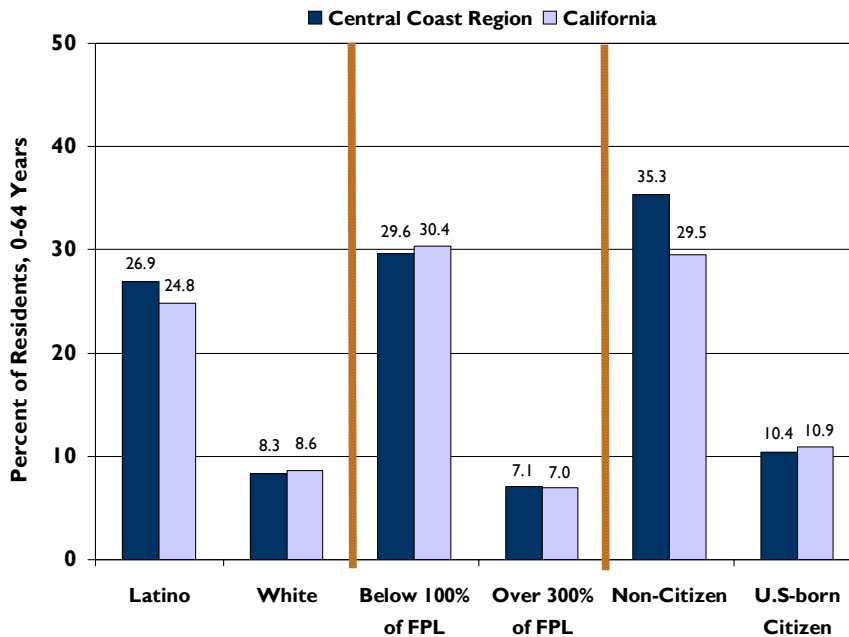


Figure 59: Percentage of Residents, 0-64 Years, Who Perceived Their Health as 'Fair' or 'Poor' by Ethnicity, Poverty level and Citizenship, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

B. INFECTIOUS DISEASES

Infectious diseases remain a major cause of illness, disability, and death. In the United States, the number of deaths from infectious diseases rose 58 percent between 1980 and 1992. Deaths from infectious diseases increased by 22 percent during this period, even when excluding HIV-associated diagnoses. Considered as a group, three infectious diseases, pneumonia, influenza, and HIV infection, constituted the fifth leading cause of death in the United States in 1997 (*Healthy People 2010*, 2000). Some infectious diseases have been effectively controlled with the help of modern technology. Yet new diseases — such as SARS, Avian flu, and West Nile virus — are constantly appearing. Others, such as malaria, tuberculosis, and bacterial pneumonias, are now appearing in forms that are resistant to drug treatments.

Tuberculosis

The *Strategic Plan for the Elimination of TB in the United States* (Centers for Disease Control, 1989) set a tuberculosis (TB) elimination goal of one new case per million by 2010, with an interim goal of 3.5 cases per 100,000 persons by 2000. In 2003, there were 14,874 cases of TB reported in the U.S., or 5.17 cases per 100,000 persons (National Center for Health Statistics, 2005).

All Central Coast counties had tuberculosis rates that were close to or below the state rate of 9.2 cases per 100,000 for 2001-2003. They ranged from a low of 2.8 in Santa Cruz County to a high of 9.4 in Monterey County. The *Healthy People 2010* national objective is 1.0 case per 100,000 persons (CA Department of Health Services, 2005). (Figure 60).

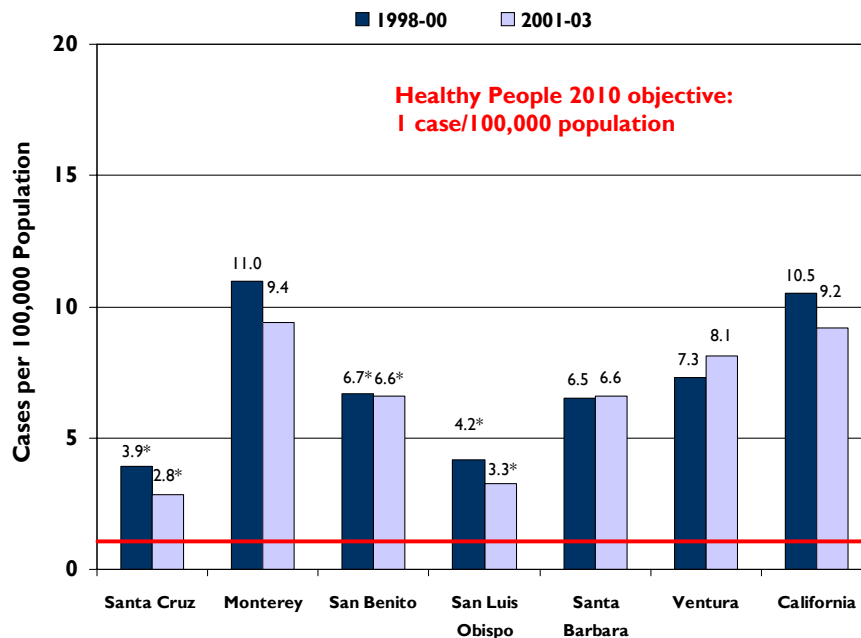


Figure 60: Crude Case Rate for Tuberculosis, Central Coast Region, 1998-2000 to 2001-2003

Source: CA Department of Health Services, 2005

*The rates are unreliable; relative standard error greater than or equal to 23%.

Chlamydia

Chlamydia is the most common reportable communicable disease in the United States, with an estimated three million new cases per year. Under-reporting is substantial because most people with chlamydia are not aware of their infections and do not seek testing. Also, testing is not often done as patients are simply treated based upon symptoms. The 1997 landmark report, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, by the Institute of Medicine (Eng, et al., 1997), strongly advocated widespread screening for chlamydia in the United States to identify asymptomatic infections. In 2003, 877,478 chlamydial infections were reported to the Centers for Disease Control (CDC) from the 50 states and the District of Columbia (National Center for Health Statistics, 2005).

The rates for chlamydia infections have grown dramatically in all Central Coast counties. In 2001-2003, the rates ranged from 167 per 100,000 persons in San Luis Obispo County to 288 in Monterey County. Rates in all Central Coast counties were below the state rate of 310 (CA Department of Health Services, 2005). (Figure 61). State and national rate definitions for chlamydia differ, thus comparison to the national objective cannot be made.

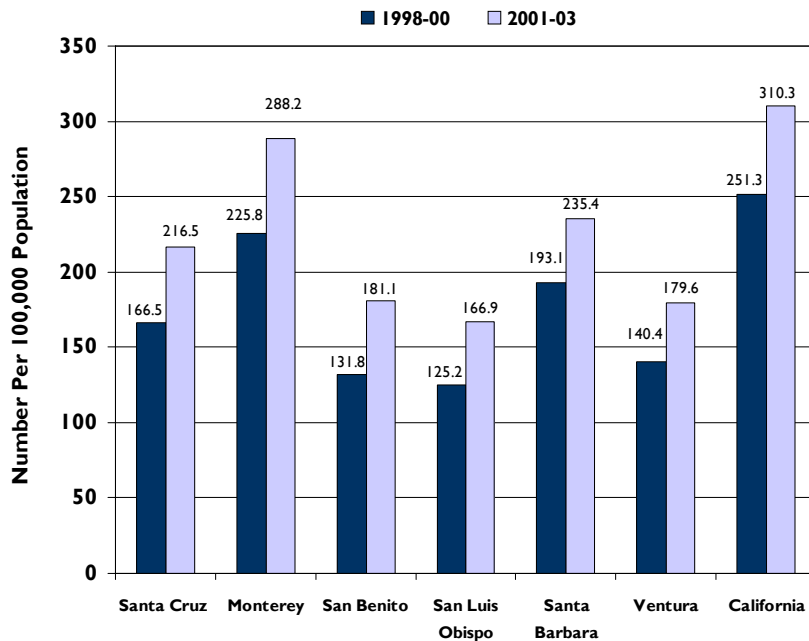


Figure 61: Crude Case Rate for Chlamydia, Central Coast Region, 1998-2000 and 2001-2003
 Source: CA Department of Health Services, 2005

Hepatitis C

The hepatitis C virus is one of the six viruses that together account for the majority of cases of viral hepatitis. Hepatitis C accounts for 20 percent of all cases of acute hepatitis and is responsible for 8,000-10,000 deaths nationally each year. Hepatitis C is also the leading cause for liver transplantation. It is expected that only 25-30 percent of new cases will be diagnosed due to the long period of time

between infection and when symptoms begin to appear. There is no vaccine yet, nor cure, for hepatitis C (CA Department of Health Services, 2005d).

Based on national data, 600,000 people are estimated to have hepatitis C in California, with 5,000 new cases each year. However, in 1999 there were only approximately 76,000 reported cases of hepatitis C; it is expected that cases are seriously under-reported by health care providers. (CA Department of Health Services, 2005d). Since 2003, the California Department of Health Services monitors newly reported cases, rather than chronic cases, of hepatitis C, so reporting on prevalence was not possible.

HIV/AIDS

HIV/AIDS has been reported in virtually every racial and ethnic population, every age group, and every socioeconomic group in every state in the United States. At the end of 2003, an estimated 1,039,000 to 1,185,000 persons in the United States were living with HIV/AIDS, with 24-27 percent undiagnosed and unaware of their HIV infection, and nearly 524,060 people had died from AIDS. In 2003 alone, the estimated number of deaths due to AIDS was 18,017 (CDC, 2003).

The rates of reported AIDS cases among people, 13 years and over, declined in all Central Coast counties in the periods between 1999-2000 and 2001-2003, and were all well below the state average (14.7 cases per 100,000 population aged 13 and over) in all counties. While the rate of HIV/AIDS infection in the region was significantly lower than the state rate, it continued to be much higher than the *Healthy People 2010* national objective of 1.0 per 100,000 persons, 13 years and older (CA Department of Health Services, 2005). (Figure 62).

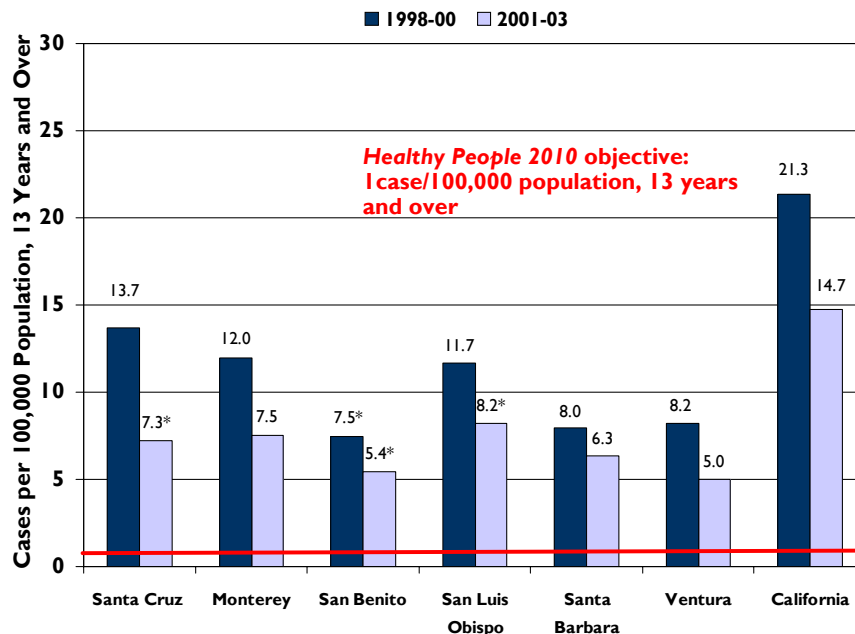


Figure 62: Crude Case Rate for AIDS, Central Coast Region, 1998-2000 to 2001-2003

Source: CA Department of Health Services, 2005

*The rates are unreliable; relative standard error greater than or equal to 23%.

C. MATERNAL AND INFANT HEALTH

Prenatal Care

Prenatal care should begin early and continue throughout pregnancy according to accepted obstetric standards. Studies have shown that prenatal care can contribute to reductions in perinatal illness, disability, and death by identifying and mitigating potential risks. Early prenatal care also helps women to address behavioral factors that contribute to poor outcomes, such as nutrition, smoking and alcohol use. According to *Healthy People 2010*, between 1990 and 2000 the percentage of mothers who begin prenatal care in the first trimester significantly increased from 76 percent to 83 percent. The most dramatic increases in the percentage of women receiving early prenatal care were among African American and Latino women, with increases of 19 percent and 22 percent respectively.

Overall, most women receive adequate prenatal care, although care varies across racial and ethnic groups. The likelihood of receiving adequate prenatal care rises with maternal age. While nearly three-quarters of all women receive adequate prenatal care, fewer than half of young pregnant girls, aged 15 years and under, receive adequate care (*Healthy People 2010*, 2000).

More women in California receive timely prenatal care than was the case five years ago. The percentage of women giving birth with late (after the first trimester) or no prenatal care dropped from 16.5 percent in 1998-2000 to 13.6 percent in 2001-2003. Comparatively, the Central Coast lagged behind the rest of California: 15.2 of women gave birth with late or no prenatal care in 2001-2003. Both the regional and the state rates exceeded the *Healthy People 2010* objective of 10 percent. (Figure 63 and Table 14).

While Santa Cruz and Ventura Counties had better rates for early prenatal care, San Benito, San Luis Obispo and Santa Barbara Counties were in the bottom half of the state. Monterey County showed significant improvement and reduced the rate of untimely prenatal care from 21.3 percent in 1998-2000 to 16.2 percent in 2001-2003. (Figure 63 and Table 14).

Table 14: Percentage of Women Who Received No or Late (After the First Trimester) or Prenatal Care, Central Coast Counties, 1998-2000 and 2001-2003

County	1998-2000		2001-2003	
	% of Women Receiving Late Prenatal Care	Rank Out of 58 California Counties	% of Women Receiving Late Prenatal Care	Rank Out of 58 California Counties
Santa Cruz	13.9	11	8.9	2
Monterey	21.3	36	16.2	23
San Benito	14.8	18	19.6	38
San Luis Obispo	17.4	21	17.6	28
Santa Barbara	20.7	32	19.2	37
Ventura	10.8	1	9.5	5
Central Coast Region	16.5		15.2	
California	16.5		13.6	

Healthy People 2010 national objective: 10 %

*A rank of 1 indicates the best performing county among California's 58 counties.
Source: CA Department of Health Services, 2005

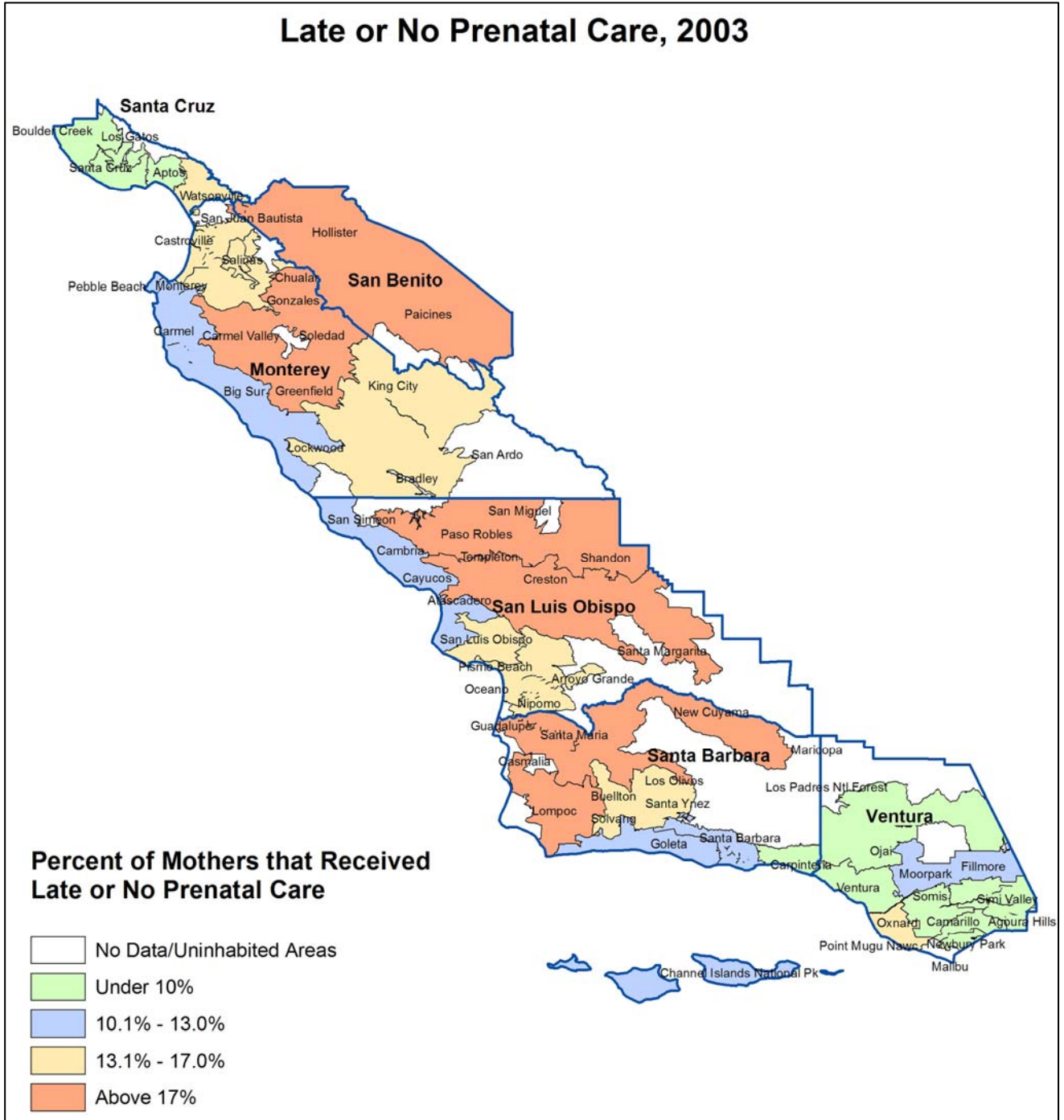


Figure 63: Percentage of Women Who Received Late (After the First Trimester) or No Prenatal Care, Central Coast Region, 2003

Source: CA Department of Health Services, 2005a

There was nearly a five-fold difference among the Central Coast cluster communities in the rate of women receiving late or no prenatal care. The cluster with the fewest women not receiving early prenatal care was Central Santa Cruz County (4.4%), and the highest (21.7%) was in the Santa Maria Valley in Santa Barbara County. (Table 15 and Table 16).

Table 15: The 10 Communities with the Lowest Percentage of Women Who Received Late or No Prenatal Care, 2003

County	Community Cluster	% of Women Receiving Late/No Prenatal Care
Santa Cruz	Central Santa Cruz County	4.4
Ventura	Conejo Valley	4.5
Ventura	East Ventura County	5.3
Ventura	Santa Rosa Valley	6.3
Santa Cruz	Santa Cruz Urban	7.3
Ventura	Ventura Urban	7.6
Santa Barbara	Montecito/Carpinteria/Summerland	8.0
Santa Cruz	North Santa Cruz County	8.4
Ventura	Ojai Valley	8.8
Monterey	Monterey Peninsula/Big Sur	10.1

Source: CA Department of Health Services, 2005a

Table 16: The 10 Communities with the Highest Percentage of Women Who Received Late or No Prenatal Care, 2003

County	Community Cluster	% of Women Receiving Late/No Prenatal Care
Monterey	Salinas Urban	15.8
Santa Cruz	South Santa Cruz County	15.9
San Luis Obispo	South SLO County	16.3
Monterey	South Salinas Valley	17.0
San Luis Obispo	North Central SLO County	17.5
Monterey	North Salinas Valley	17.5
Santa Barbara	Lompoc Valley	18.0
San Luis Obispo	North SLO County	19.0
San Benito	San Benito County	19.7
Santa Barbara	Santa Maria Valley	21.7

Source: CA Department of Health Services, 2005a

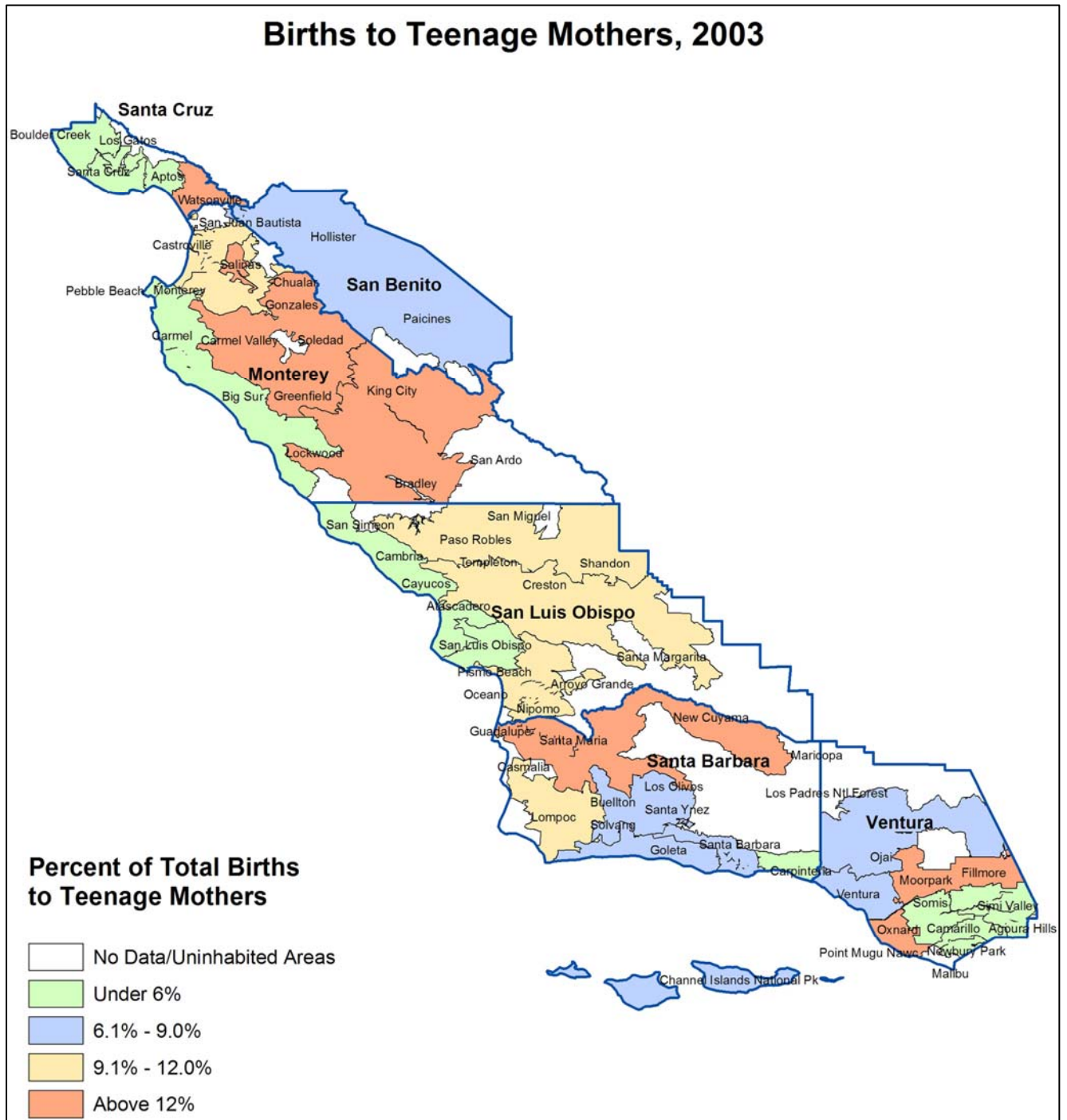


Figure 64: Percentage of Births to Teen Mothers, Central Coast Region, 2003

Source: CA Department of Health Services, 2005a

Births to Teen Mothers

The number of births to teen mothers is an indicator of the status of overall adolescent health services, education on and availability of family planning, and is associated with a host of other social and demographic factors. The risk of poor birth outcomes is greatest among the youngest mothers, aged 15 years and under (*Healthy People 2010*, 2000).

From near epidemic proportions in the mid-1990s, the Central Coast and California have seen a drop in the rate of teen births. In California, the rate of births per 1,000 women, aged 15-19 years, dropped from 50.3 in 1998-2000 to 41.1 in 2001-2003. The Central Coast's rates dropped during the same periods from 45.1 to 38.3 per 1,000 women. County rates in 2001-2003 ranged from a low of 21.3 in San Luis Obispo County to a high of 58.8 in Monterey County (CA Department of Health Services, 2005). (Table 17 and Figure 64). A national objective for the *Healthy People 2010* was not established.

Table 17: Age-Specific Birth Rates Among Women, 15-19 Years, per 1,000 Women, Central Coast Region, 1998-2000 and 2001-2003

County	1998-2000		2001-2003	
	Birth Rate per 1000 Women Aged 15-19	Rank Out of 58 California Counties	Birth Rate per 1000 Women Aged 15-19	Rank Out of 58 California Counties
Santa Cruz	37.7	26	32.2	27
Monterey	65.2	52	58.8	51
San Benito	55.5	43	40.4	37
San Luis Obispo	25.2	8	21.3	7
Santa Barbara	44.9	33	40.2	36
Ventura	42.2	30	36.6	32
Central Coast Region	45.1		38.3	
California	50.3		41.1	

*A rank of 1 indicates the best performing county among California's 58 counties.
Source: CA Department of Health Services, 2005

Calculating age-specific birth rates by community clusters was not possible as the available population projections are not available at zip code level. In order to present community level differences, percentages of live births to women, aged 15-19 years, were calculated.

In 2003, there was more than a seven-fold difference between Central Coast cluster communities in the percentage of births to young women, aged 15-19 years. The community cluster with the lowest percentage of teen births was "Central Santa Cruz County" at 2.3 percent, while "South Salinas Valley" had the highest percentage at 17.2 percent. (Table 18 and Table 19).

Table 18: The 10 Communities with the Lowest Percentage of Births to Teens, of All Live Births, 2003

County	Community Cluster	% of Births to Teen Mothers
Santa Cruz	Central Santa Cruz County	2.3
Ventura	Conejo Valley	3.0
Monterey	Monterey Peninsula/Big Sur	3.8
Santa Cruz	North Santa Cruz County	3.8
Ventura	Santa Rosa Valley	4.1
Santa Barbara	Montecito/Carpinteria/Summerland	4.9
Ventura	East Ventura County	5.2
San Luis Obispo	San Luis Obispo Urban	5.2
Santa Cruz	Santa Cruz Urban	5.5
San Luis Obispo	North Coastal SLO County	6.0

Source: CA Department of Health Services, 2005a

Table 19: The 10 Communities with the Highest Percentage of Births to Teens, of All Live Births, 2003

County	Community Cluster	% of Births to Teen Mothers
San Luis Obispo	South SLO County	10.3
Monterey	North Coastal Monterey County	10.7
San Luis Obispo	North Central SLO County	11.1
Ventura	Santa Clara Valley	12.5
Monterey	Salinas Urban	13.0
Ventura	Greater Oxnard Plains	13.1
Santa Cruz	South Santa Cruz County	13.6
Santa Barbara	Santa Maria Valley	13.9
Monterey	North Salinas Valley	14.4
Monterey	South Salinas Valley	17.2

Source: CA Department of Health Services, 2005a

Low Birthweight

Low birthweight (LBW) is associated with long-term disabilities, such as cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities. According to research reviewed by *Healthy People 2010*, expenditures for the care of LBW infants (under 2,500 grams or approximately 5.5 pounds) totaled more than half of the costs incurred for all newborns, despite the low proportion of pregnancies resulting in LBW babies (*Healthy People 2010*, 2000).

Low Birthweight, 2003

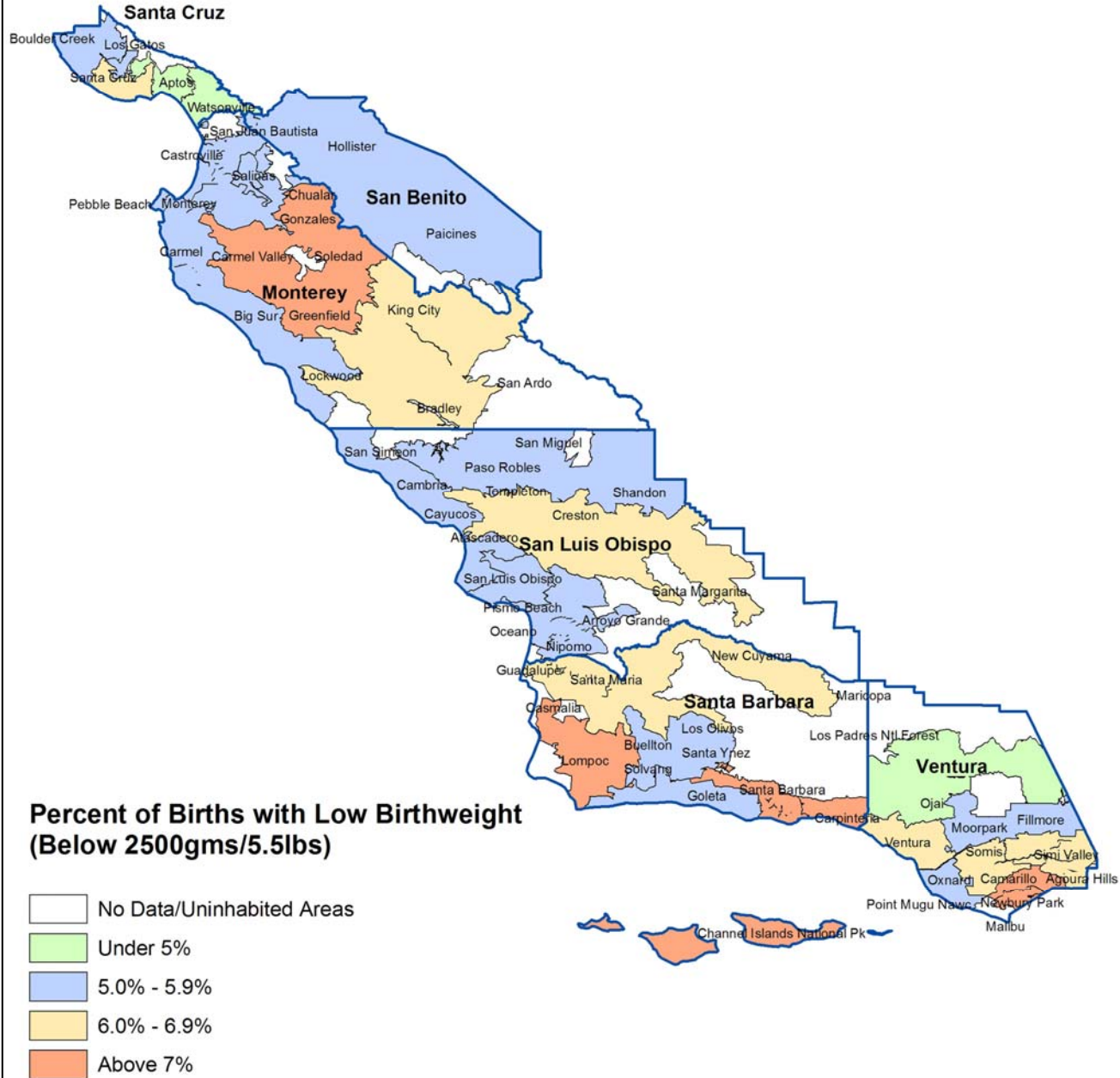


Figure 65: Percentage of Newborns with Low Birthweight (Less than 2500 Grams), Central Coast Region, 2003

Source: CA Department of Health Services, 2005a

The percentage of Central Coast babies born with low birth weight in 2001–2003 was 5.6 percent. This was lower than the California rate of 6.4 percent, but higher than the *Healthy People 2010* objective of 5.0. The rates of low weight births in the region varied from 6.4 percent in Santa Barbara County to 4.7 percent in San Benito County. Over the past five years, the overall rate of low weight births in the Central Coast has risen slightly from 5.4 percent to the current 5.6 percent, driven by increases in Monterey, San Luis Obispo, Santa Barbara and Ventura counties. (Table 20).

Table 20: Percentage of Newborns with Low Birth Weight (Less than 2500 Grams), Central Coast Region, 1998-2000 and 2001-2003

County	1998-2000		2001-2003	
	% of Low Birthweight Babies	Rank out of 58 California Counties*	% of Low Birthweight Babies	Rank out of 58 California Counties*
Santa Cruz	5.3	22	5.2	8
Monterey	5.6	30	5.8	24
San Benito	5.2	15	4.7	5
San Luis Obispo	5.0	10	5.5	16
Santa Barbara	5.7	33	6.4	39
Ventura	5.7	32	6.1	31
Central Coast Region	5.4		5.6	
California	6.2		6.4	

Healthy People 2010 national objective: 5.0%

*A rank of 1 indicates the best performing county among California's 58 counties.

Source: CA Department of Health Services, 2005

The community clusters in the Central Coast show wide disparities in the rate of low birth weight births. The community cluster with the lowest percentage of low birthweight babies in 2003 was Ojai Valley (4.2%), while the highest percentage, at 8.3 percent, was Conejo Valley; both in Ventura County. (Figure 65, Table 21, and Table 22).

Table 21: The 10 Communities with the Lowest Percentage of Low Birthweight Babies (Less than 2500 Grams), 2003

County	Community Cluster	% of Low Birthweight Babies
Ventura	Ojai Valley	4.2
Santa Cruz	South Santa Cruz County	4.3
Santa Cruz	Central Santa Cruz County	4.4
San Luis Obispo	South SLO County	4.9
San Luis Obispo	North Coastal SLO County	4.9
Monterey	North Coastal Monterey	4.9
San Benito	San Benito County	5.0
Santa Cruz	North Santa Cruz County	5.1
San Luis Obispo	San Luis Obispo Urban	5.2
Monterey	Monterey Peninsula/Big Sur	5.4

Source: CA Department of Health Services, 2005a

Table 22: The 10 Communities with the Highest Percentage of Low Birthweight Babies (Less than 2500 Grams), 2003

County	Community Cluster	% of Low Birthweight Babies
Ventura	Santa Rosa Valley	6.2
San Luis Obispo	North Central SLO County	6.2
Santa Barbara	Santa Maria Valley	6.2
Santa Cruz	Santa Cruz Urban	6.6
Ventura	East Ventura County	6.8
Santa Barbara	Montecito/Carpinteria/Summerland	7.0
Santa Barbara	Lompoc Valley	7.1
Monterey	North Salinas Valley	7.9
Santa Barbara	Santa Barbara Urban	8.0
Ventura	Conejo Valley	8.3

Source: CA Department of Health Services, 2005a

Infant Mortality

Infant mortality is an important measure of a nation's health and a worldwide indicator of population health status and social well-being. In the United States, 6.7 infants died per 1,000 live births in 2003-2004, compared to the *Healthy People 2010* goal of 4.5 deaths per 1,000 live births. Nationally, the infant mortality rates between the various race/ethnic groups vary. The infant mortality rate for non-Hispanic blacks was 13.6, while the rate for Hispanics was 5.5 (United Health Foundation, 2005).

In 2001-2003, the infant mortality rate in the Central Coast was 4.8 per 1,000 live births, compared to the state rate of 5.5. Both rates were higher than the *Healthy People 2010* objective. Monterey County had the highest infant mortality rate (5.8), while neighboring Santa Cruz County had the lowest (4.2), although Santa Cruz County's rate is statistically unstable. (Table 23).

Table 23: Infant Mortality Rates (Number of Infant Deaths per 1,000 Live Births), Central Coast Region, 1998-2000 and 2001-2003

County	1998-2000		2001-2003	
	Infant Mortality Rate	Rank within 58 California Counties	Infant Mortality Rate	Rank within 58 California Counties
Santa Cruz	5.7	29	4.2*	14
Monterey	5.7	30	5.8	36
San Benito	5.6*	28	4.3*	15
San Luis Obispo	5.3*	24	4.4*	18
Santa Barbara	4.2	11	4.8	21
Ventura	6.4	37	5.2	26
Central Coast Region	5.5		4.8	
California	5.8		5.5	

Healthy People 2010 national objective: 4.5 deaths per 1,000 live births

A rank of 1 indicates the best performing county among California's 58 counties.

*Rate or percent unreliable; relative error greater than or equal to 23%.

Source: CA Department of Health Services, 2005

D. CHRONIC DISEASES AND CONDITIONS

Asthma

According to the American Lung Association, asthma is a reversible obstructive lung disease, caused by increased reaction of the airways to various stimuli. It is a chronic inflammatory condition with acute exacerbations. Asthma can be a life-threatening disease if not properly managed. In 2003, it was estimated that 20 million Americans currently have asthma. Of these, 11 million Americans (4 million children under 18) had an asthma attack. In 2002, there were 4,261 deaths attributed to asthma -- an age-adjusted rate of 1.5 per 100,000. The annual direct health care cost of asthma is approximately \$11.5 billion; indirect costs (e.g. lost productivity) add another \$4.6 billion, for a total of \$16.1 billion dollars. Prescription drugs represented the largest single direct cost at \$5 billion. The value of lost productivity due to death represented the largest single indirect cost at \$1.7 billion (American Lung Association, 2005).

Environmental and occupational factors contribute to illness and disability from asthma. Decreases in lung function and a worsening of asthma have been associated with exposure to allergens, indoor pollutants (e.g. tobacco smoke), and ambient air pollutants (e.g. ozone, sulfur dioxide, nitrogen dioxide, acid aerosols, and particulate matter). Environmental factors are associated with upper respiratory infections that further contribute to illness and disability in children and adults (*Healthy People 2010*, 2000).

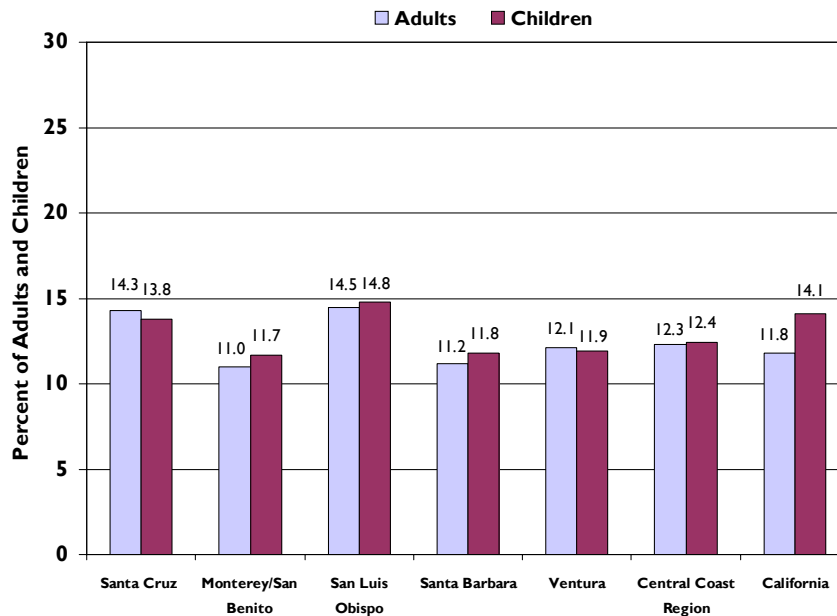


Figure 66: Percentages of Adults and Children Diagnosed with Asthma, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Asthma is not a reportable public health condition, so determining the number of asthma cases is difficult. One source of asthma data is the California Health Interview Survey, which asked interviewees

whether they had ever been diagnosed with asthma. The other source is hospital utilization reports that show the number of hospital discharges with a primary diagnosis of asthma. These hospitalization rates are useful for comparing the rates of asthma among counties and for gauging the effectiveness of asthma management on an outpatient basis.

In the Central Coast, the percentage of CHIS responding adults who said they had been diagnosed with asthma was 12.3 percent, slightly higher than the California rate of 11.8 percent. Rates among counties in the region varied between 14.5 percent for San Luis Obispo County and 11.0 percent for Monterey/San Benito. (Figure 66).

Among Central Coast adults, fewer Latino, low income and non-citizen residents were diagnosed with asthma than higher income, white residents according to 2001, 2003 CHIS. It is not known whether this finding is due to actual lower prevalence of asthma in these populations or if these populations simply do not access care for asthma diagnosis. (Figure 67).

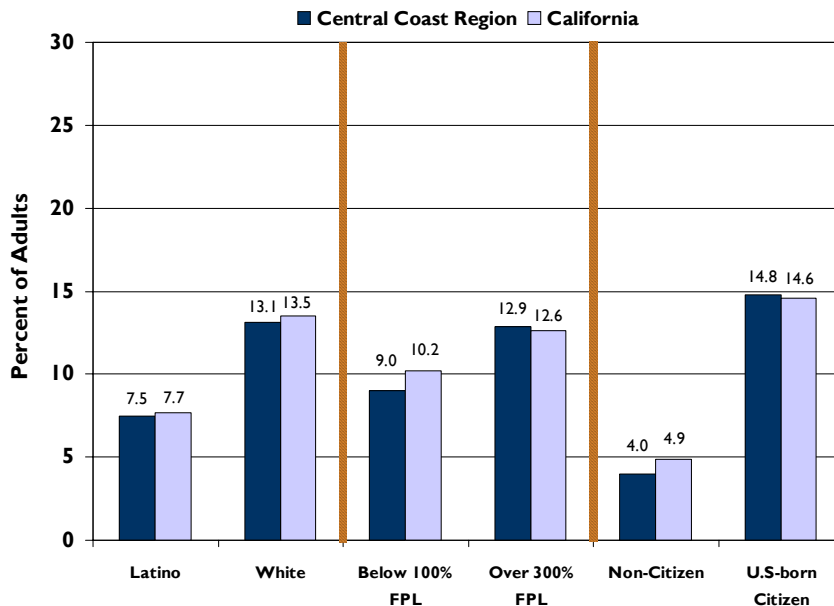


Figure 67: Percentage of Adults Diagnosed with Asthma by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Hunger and Food Insecurity

Food insecurity – the lack of assured access to enough food for an active healthy life through socially acceptable means — has been growing in California. Food insecurity – and in the severe form, hunger – are risks to health from poor nutrition, pain and discomfort. Children are more likely to miss school, have poorer cognitive functioning, and have more health problems such as headaches, colds and ear infections. Adults face increased risk of complications from diseases such as diabetes (Harrison, et al., 2005).

On the Central Coast, food insecurity affected at least one in three adults in all counties in 2001, except for Ventura County. Moreover, it was estimated that 12.7 percent (in Monterey/San Benito Counties) and 16.3 percent (in Santa Cruz County) of people, over 18 years and with incomes less than 200% of the federal poverty level, suffers from hunger. These rates for hunger exceed the state rate of 10.3 percent. (Figure 68).

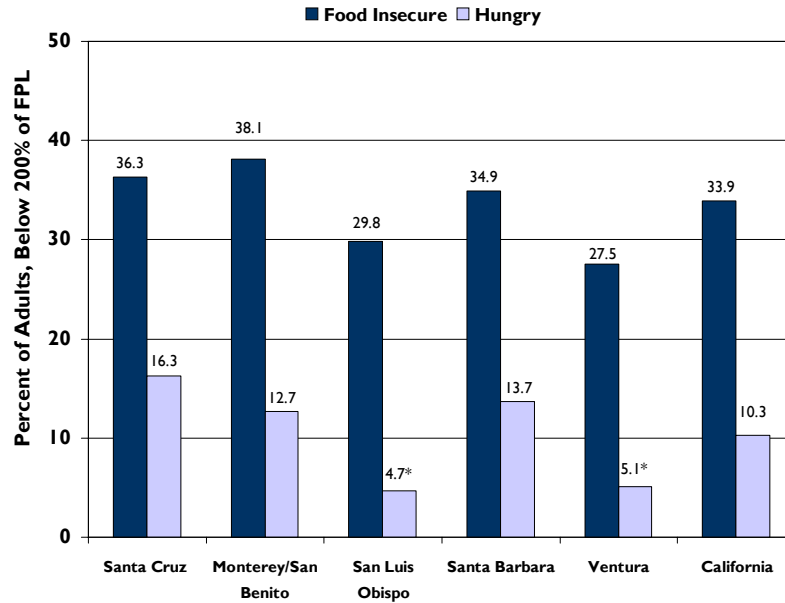


Figure 68: Percentage of Adults, 18 Years and Over, Below 200% of Poverty Level Who are Food Insecure and Hungry, Central Coast Region, 2003

Source: CHIS 2001, 2003; UCLA Health Policy Research Brief, 2005

*Data are unreliable and should be interpreted with caution.

Physical Inactivity

Regular physical activity is important in preventing obesity and chronic diseases, such as diabetes, heart disease, osteoporosis and some types of cancer (U.S. Department of Health and Human Services, 1996). Many people live sedentary lives; in fact, 40 percent of adults in the United States do not participate in any leisure-time physical activity (U.S. Department of Health and Human Services, 2006). Even walking, considered a moderate-intensity activity, can have significant health benefits.

Among school children, a physical fitness test is administered each year through the schools, which monitors six criterion-based physical fitness standards representing levels of fitness that offer protection against the diseases brought on by sedentary living (CA Department of Education, 2006a). Between 2001-2002 and 2004-2005, the percentage of 7th graders achieving six of the six fitness standards increased in the Central Coast Region and in California. Yet, only one-third of seventh graders achieved all of the standards. (Figure 69).

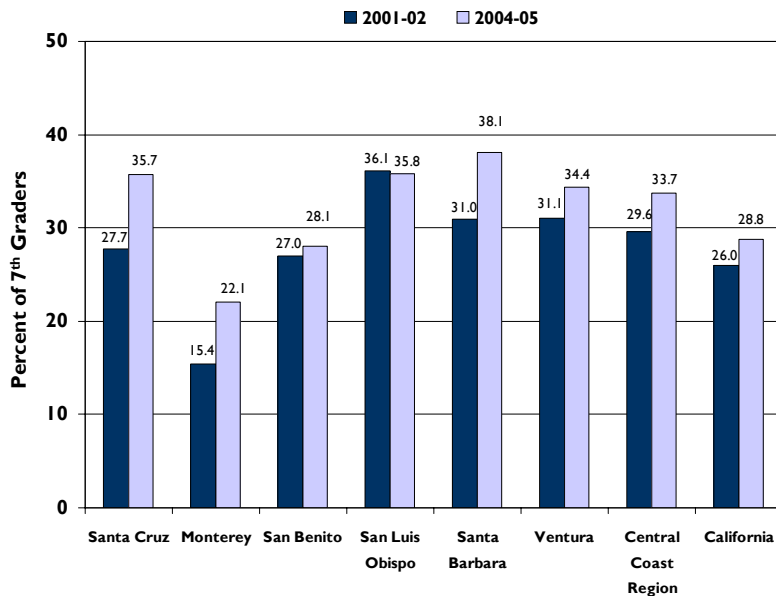


Figure 69: Percentage of 7th Graders Achieving All Six of the Fitness Standards, Central Coast Region, 2001-2002 and 2004-2005

Source: CA Department of Education, 2005

Overweight and Obesity

Studies have shown that nutritional and dietary factors contribute substantially to the burden of preventable illnesses and premature deaths in the United States. According to *Healthy People 2010*, dietary factors are associated with four of the ten leading causes of death: coronary heart disease, some types of cancer, stroke, and type 2 diabetes. In California it is estimated that the cost of physical inactivity, obesity and overweight in year 2000 was \$21.7 billion in direct and indirect medical care, workers' compensation and lost productivity (Chenoweth, 2005).

There is much concern about the increasing prevalence of overweight among children and adolescents. Overweight children and adolescents more frequently have high cholesterol and high blood pressure – factors for heart disease – compared to healthy weight children and the rate of Type 2 diabetes as increased among children and adolescents. Furthermore, excess weight acquired during childhood or adolescence may persist into adulthood and increases the risk for chronic diseases later in life. Body weight is influenced by a combination of genetic, metabolic, behavioral, environmental, cultural and socio-economic influences.

More than half of adults in the Central Coast (53.9%) were self-reported to be overweight or obese, approximately the same rate as California (55.2%) according to CHIS. The county rates varied from a high in Monterey/San Benito (59.8%) to a low in Santa Cruz (51.2%). Approximately six out of ten adults between 40 and 80 years old were overweight or obese. (Figure 70).

The percentage of Latinos being overweight or obese (64.2%) was higher than the percentage of whites (50.3%) in the Central Coast. Wealthier residents were slightly more likely to be overweight or obese than lower income adults (52.4% of adults over 300% FPL and 50.8% for adults below FPL). Non-

citizens (57.8%) were also slightly more likely to be overweight than U.S. born residents (52.4%). (Figure 71).

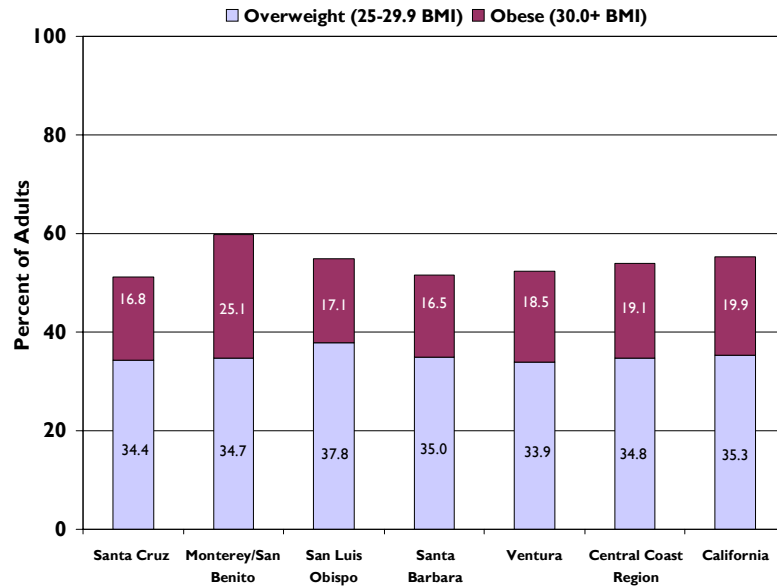


Figure 70: Percentage of Adults, 18 Years and Over, Overweight and Obese, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

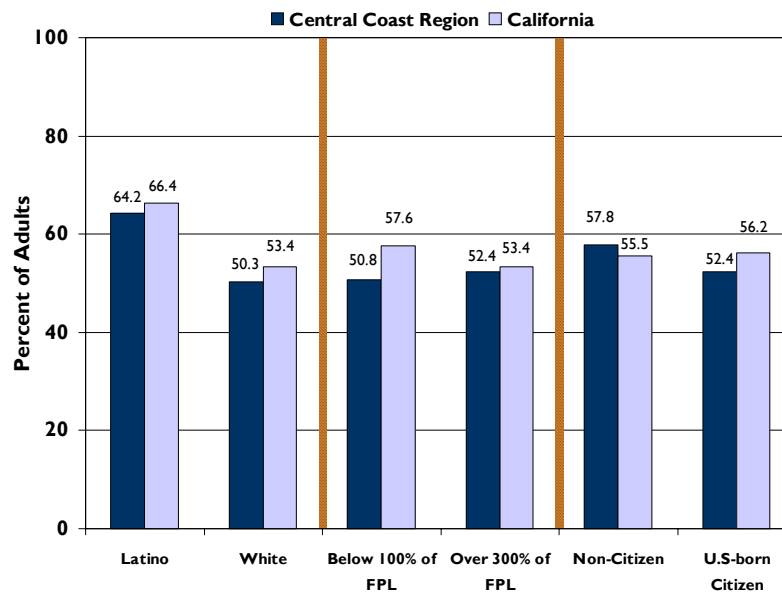


Figure 71: Percentage of Adults, 18 Years and Over, Overweight and Obese by Ethnicity, Poverty Level and Citizenship Status, Central, Central Over Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

A high percentage of children were also overweight and at risk of adult obesity. The percentage of seventh graders who are above normal for their Body Mass Index (BMI) ranged from a low of 27.2 percent in San Luis Obispo County to 36.5 percent in Monterey County in 2004-2005. The state average was 32.9 percent (CA Department of Education, 2005). (Figure 72).

According to CHIS data, 12.2 percent of adolescents, aged 11-17 years, could be described as extremely overweight, based upon their reported heights and weights (above 95th percentile for Body Mass Index) regionally. In the Central Coast Region, Latino children (19.4%) are over twice as likely to be overweight than are their white counterparts (8.2%), and children under the poverty level (23.7%) are more than twice as likely to be overweight than children over 300% of FPL (8.6%). (Figure 73).

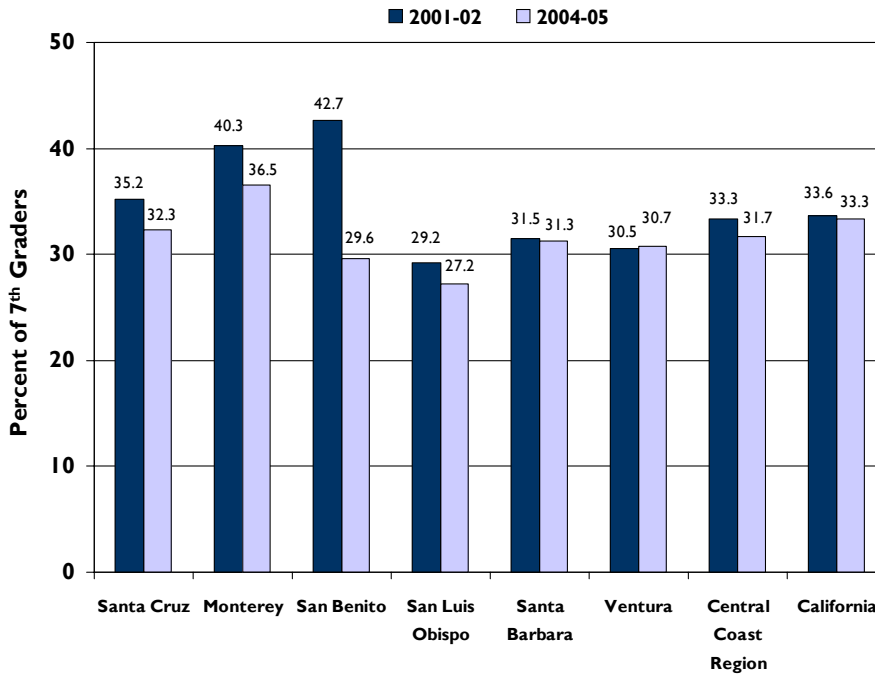


Figure 72: Percentage of 7th Graders Above Normal Body Mass Index, Central Coast Region, 2001-2002 and 2004-2005

Source: CA Department of Education, 2005

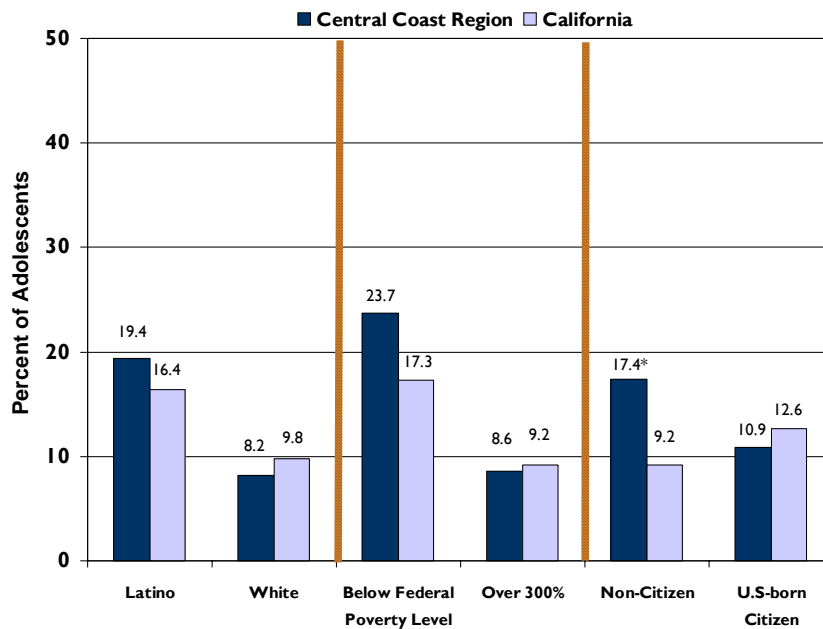


Figure 73: Percentage of Adolescents, 11-17 years, Overweight (over the 95th Percentile for BMI) by Ethnicity, Poverty Level and Citizenship Status, Central, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

*The percentage is unstable due to small sample size and should be interpreted with caution.

Diabetes

During 1980–2002, the number of people with diabetes in the United States more than doubled, from 5.8 million to 13.3 million. Although more than 18 million Americans have diabetes, 5.2 million cases are undiagnosed (CDC, 2005a). Diabetes also is a costly disease. The CDC estimates that the cost of diabetes in the United States in 2002 was \$132 billion of which \$92 billion was direct medical costs, and indirect costs (disability, work loss, premature death) were \$40 billion (CDC, 2005a).

Diabetes disproportionately affects ethnic minority populations. For example, the percentage of African Americans, aged 20 and over, with diabetes is estimated to be 14.8 percent, and for those of Mexican descent it is 13.6 percent. However, among whites, it is estimated that 8.0 percent have diabetes. Native American communities also have very high rates of diabetes (CDC, 2005b).

According to the 2003 CHIS survey, 5.2 percent of adults in the Central Coast had been diagnosed with diabetes, compared to 6.6 percent statewide. No county exceeded the state rate of 6.6 percent. Similarly the diabetes death rate was approximately equal to or less than the age-adjusted state rate (21.3 deaths per 100,000 population) in all counties (CA Department of Health Services, 2005). (Figure 74 and Figure 75). The national objective is based on both underlying and contributing cause of death which requires use of multiple cause death data files. California's data exclude multiple/contributing causes of death, thus no comparison can be made toward the objective.

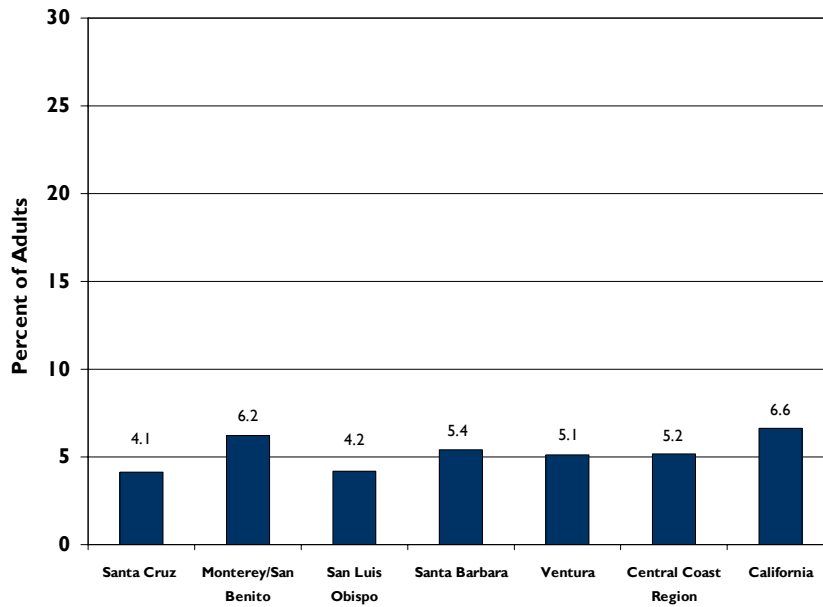


Figure 74: Percentage of Adults Diagnosed with Diabetes, Central Coast Region, 2003
 Source: 2003 CHIS; UCLA Center for Health Policy Research, 2005

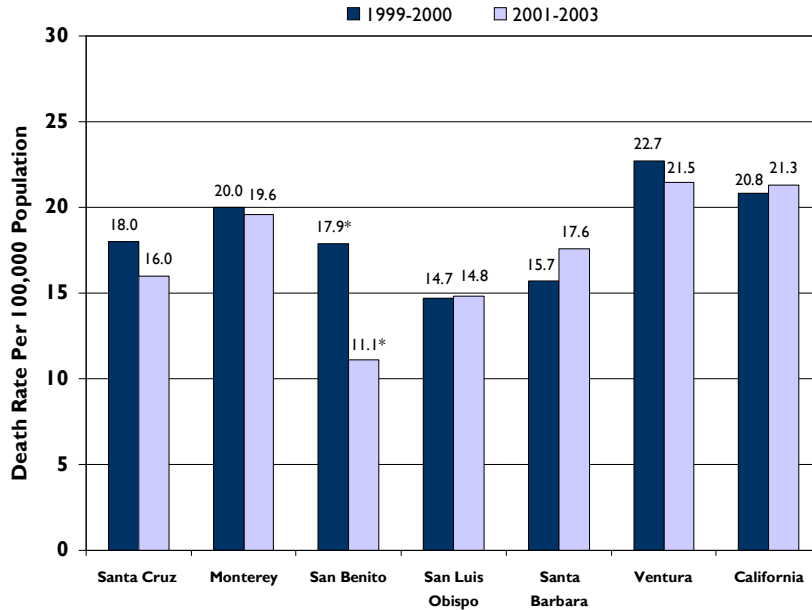


Figure 75: Age-Adjusted Death Rates Due to Diabetes in Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

*The rates are unreliable; relative standard error greater than or equal to 23%.

Hypertension or High Blood Pressure

According to the American Heart Association, nearly one in three U.S. adults has high blood pressure, but because there are no symptoms, nearly one-third of these people do not know they have it. Uncontrolled high blood pressure can lead to stroke, heart attack, heart failure or kidney failure. This is why high blood pressure is often called the "silent killer" (American Heart Association, 2005).

The region overall has a slightly lower percentage of adults, over aged 45 years, who had been diagnosed with hypertension than California as a whole. All counties, except for San Luis Obispo (24.9%) had rates of hypertension that are lower than the state rate of 22.8 percent. (Figure 76).

The hypertension rates for African-Americans in the Central Coast (42.4%) are much higher than for whites (23.8%), and Latinos (16.4%). Higher income residents also have higher rates of hypertension compared to lower income residents (22.2% for adults over 300% FPL and 15.5% for adults under FPL). U.S. born residents reported over twice the rates of hypertension than non-citizens (23.8% for U.S. born residents and 11.5% for non-citizens). (Figure 77).

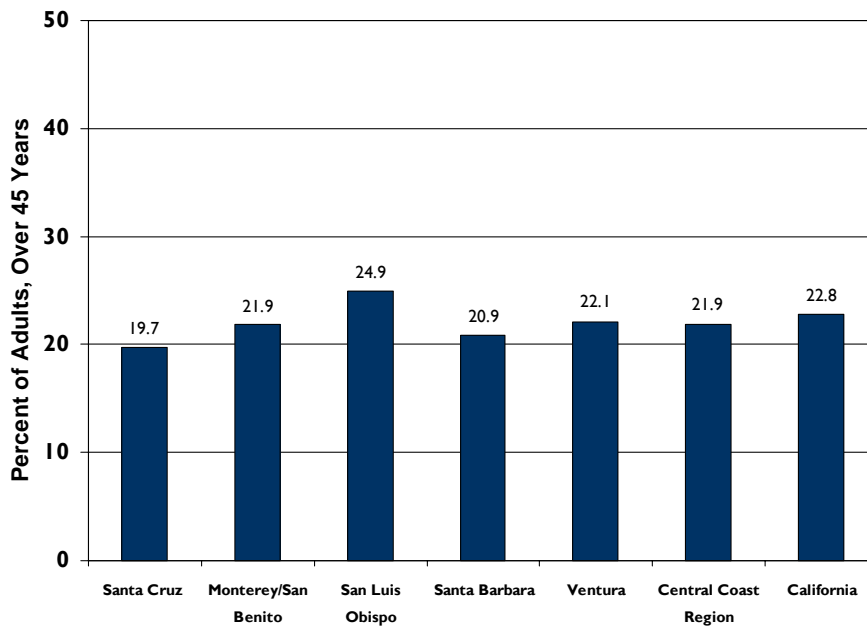


Figure 76: Percentage of Adults, 18 Years and Over, Diagnosed with Hypertension, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

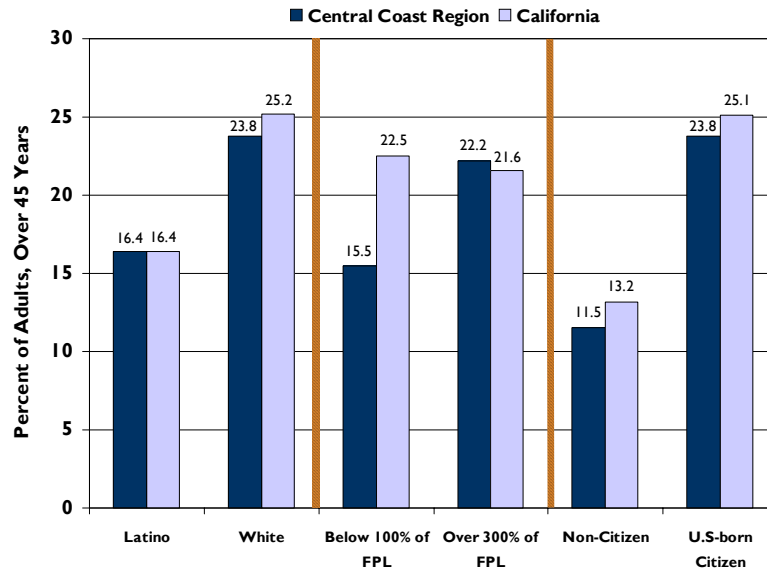


Figure 77: Percentage of Adults, 18 Years and Over, Diagnosed with Hypertension by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Coronary Heart Disease

Coronary Heart Disease (CHD) is the single largest killer of Americans, accounting for one of five deaths in 2003. Over 650,000 persons are expected to die from CHD in 2006. In 2006, an estimated 700,000 Americans will have a new coronary attack and about 500,000 will have a recurrent attack (American Heart Association, 2006).

Risk factors for coronary heart disease include: tobacco use, high blood cholesterol, physical inactivity, overweight and obesity, high blood pressure and diabetes. Nearly 100 million people, or half of American adults, have cholesterol levels that are high or borderline high. Nearly one in three adults has high blood pressure, or hypertension, another major risk factor for CHD (American Heart Association, 2006).

According to CHIS, 6.7 percent of Central Coast adults have been diagnosed with coronary heart disease (CHD), compared to 6.9 percent of adults across the state. However, Santa Cruz, Monterey and San Benito each had higher percentages compared to the state. (Figure 78). Furthermore, whites were more than twice as likely as Latinos to be diagnosed with CHD (8.0% of whites and 3.7% of Latinos); wealthier persons were also slightly more likely to have been diagnosed with CHD (6.3% of persons over 300% FPL and 5.8% of person under FPL); and U.S. born residents were twice as likely than immigrants to have CHD (7.7% U.S. born and 3.8% of non-citizens). (Figure 79).

The age-adjusted crude death rates for coronary heart disease in all counties in the Central Coast region were below the state rate of 175.9 per 100,000 for 2001-2003, as well as below the *Healthy People 2010* national objective of 166.0 (CA Department of Health Services, 2003a). Also, each county

in the Central Coast Region had a positively decreasing death rate from 1999-2000 to 20001-2003, except for San Benito. (Figure 80).

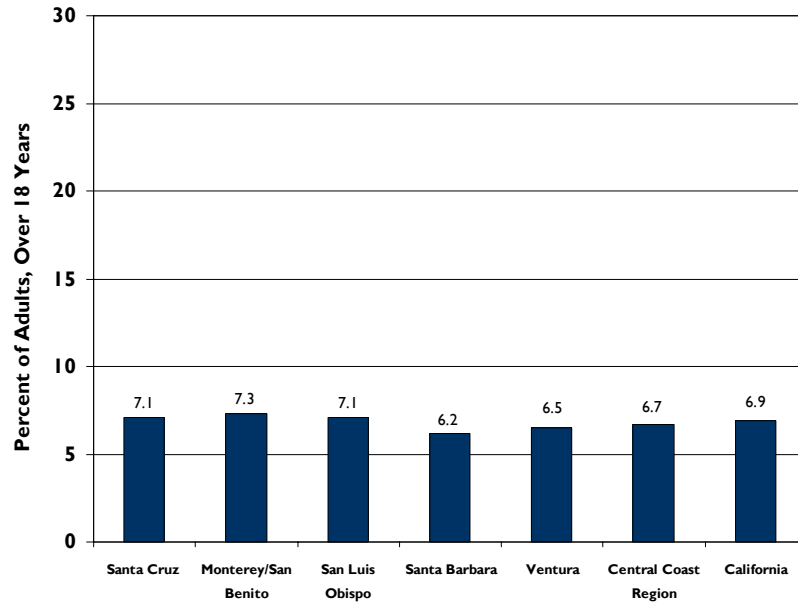


Figure 78: Percentage of Adults Diagnosed with Coronary Heart Disease, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

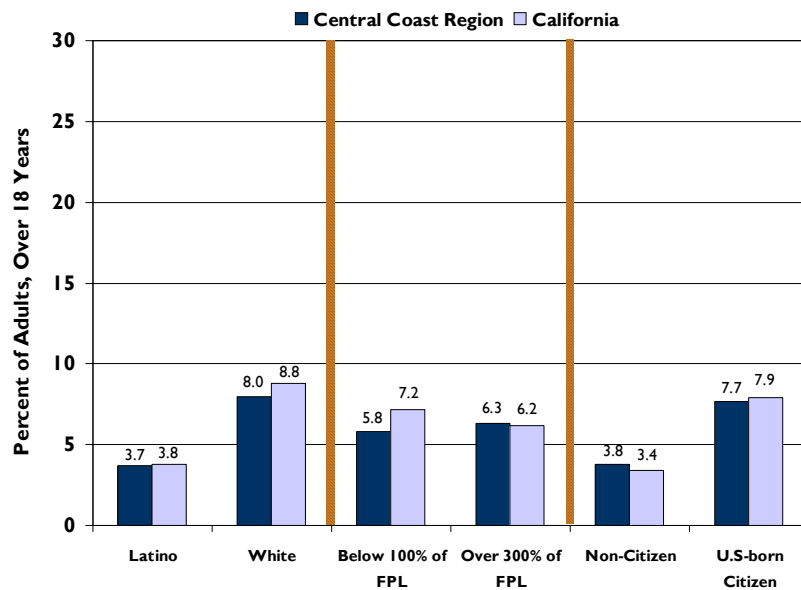


Figure 79: Percentage of Adults Diagnosed with Coronary Heart Disease by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

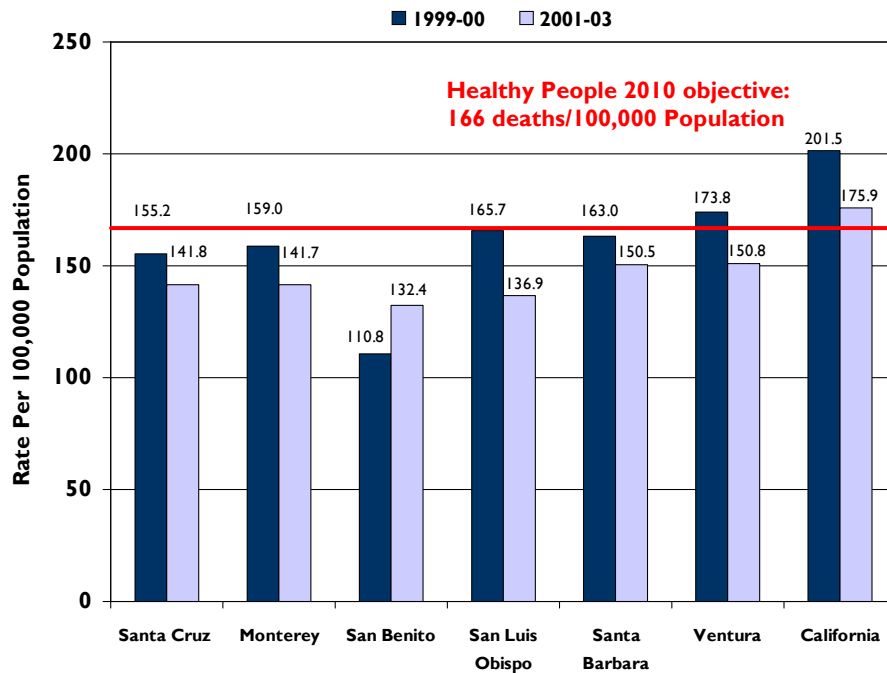


Figure 80: Age-Adjusted Death Rates Due to Coronary Heart Disease, Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

Cancer

Cancer is the second leading cause of death in the United States. During 2000, an estimated 1,220,100 persons in the United States were diagnosed with cancer and 553,000 persons died from cancer, according to *Healthy People 2010* (Freid, 2003). These estimates did not include most skin cancers, new cases of which are estimated to exceed 1 million per year. In addition to the human cost of cancer, the financial toll of cancer is substantial. The overall annual costs for cancer are estimated at \$107 billion. Treatment for lung, breast, and prostate cancers alone accounts for more than half of all direct medical costs for cancer treatment (*Healthy People 2010*, 2000).

Cancer deaths are reported as the number of deaths due to all cancers, using three year averages. The rates have been age-adjusted to show what the rate would be if the population were distributed by age in the same proportions as the United States population in 2000. This adjustment helps to account for differences in age distribution in individual counties.

Although slightly more Central Coast adults compared to California adults reported in CHIS that they had been diagnosed with cancer (8.8 percent of Central Coast residents and 8.3 percent of Californians), the age-adjusted cancer death rates in all Central Coast counties (160.8 per 100,000) were less than the state rate of 169.6 per 100,000 persons in the three year period from 2001 to 2003. Cancer death rates have been dropping throughout the Central Coast as well as in California. Monterey's and San Benito's cancer death rates were lower than the *Healthy People 2010* national objective of 159.9 (CA Department of Health Services, 2003). (Figure 81 and Figure 82).

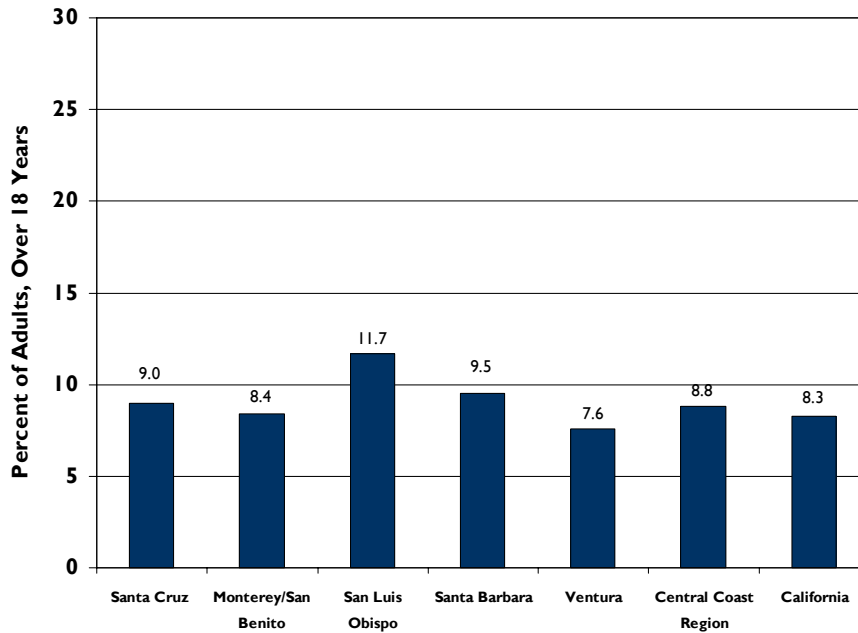


Figure 81: Percentage of Adults Diagnosed with Any Cancer, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS, UCLA Center for Health Policy Research, 2005

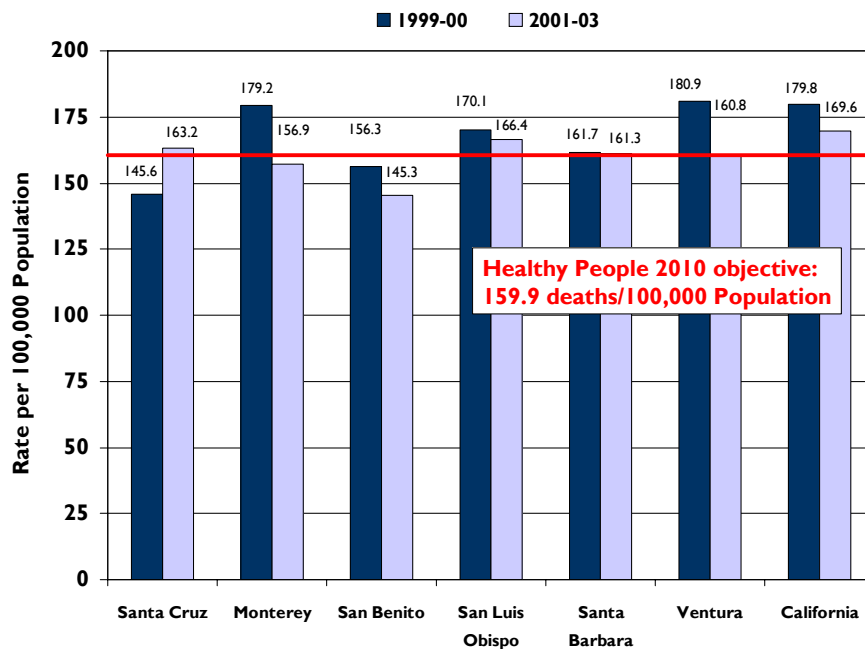


Figure 82: Age-Adjusted Death Rates Due to All Cancers, Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

Lung Cancer

Lung cancer is the most common cause of cancer death in the United States. The American Cancer Society estimated that 172,570 new cases of lung cancer would be diagnosed in 2005; and 163,510 persons would die from lung cancer in 2005 (American Cancer Society, 2005).

Cigarette smoking is the most important risk factor for lung cancer, accounting for up to 78 percent of lung cancer deaths among females and up to 91 percent of lung cancer deaths among males. Smoking cessation, after 10 years of abstinence, has been shown to decrease the risk of lung cancer by 30 percent to 50 percent of the risk of continuing smokers (*Healthy People 2010*, 2000).

The age-adjusted rate for lung cancer deaths in California in 2001-2003 was 43.8 per 100,000 persons, down from 46.8 for the period of 1999-2000. In the Central Coast counties, the age-adjusted death rates for lung cancer in 2001-2003 were all lower than the State rate, except in San Luis Obispo County where the rate was 46.4 (CA Department of Health Services, 2003a). The *Healthy People 2010* objective is 44.9 per 100,000 persons. (Figure 83).

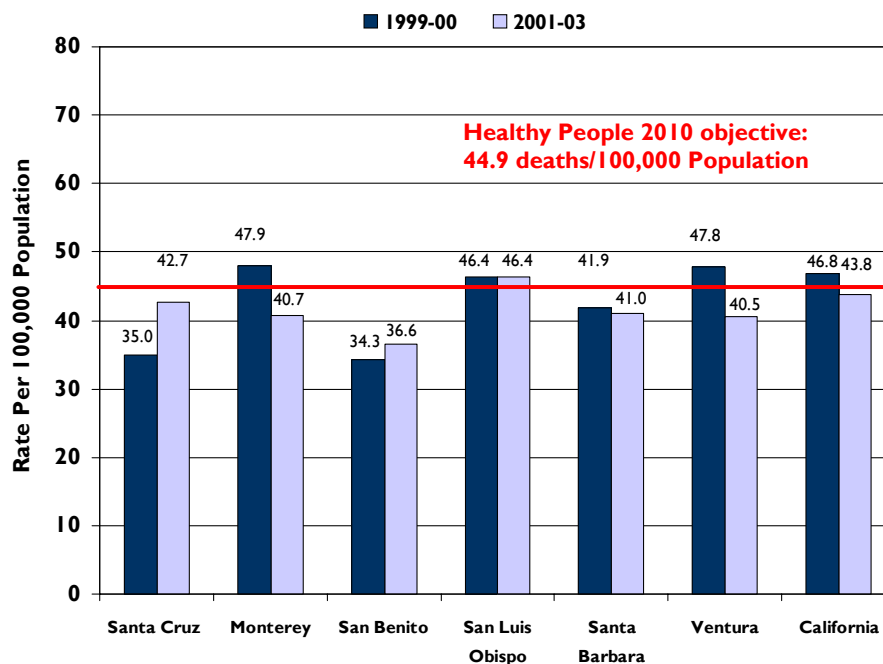


Figure 83: Age-Adjusted Death Rates Due to Lung Cancer, Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

Breast Cancer

Breast cancer is the most common type of cancer among women in the United States. An estimated 211,240 new cases were expected to be diagnosed in women in 2005 and about 40,410 U.S. women were expected to die from breast cancer in 2005. Death from breast cancer can be reduced substantially if the tumor is discovered at an early stage (American Cancer Society, 2005).

In a recent study of women diagnosed with breast cancer between 1992 and 1998, as reported by the American Cancer Society in 2003, significant disparities existed in the diagnosis, treatment, and survival rates for breast cancer between women of different ethnic and racial backgrounds. African American, Native American, and Hispanic White women were more likely than non-Hispanic White and Asian/Pacific Islander women to be diagnosed with more advanced tumors, indicating a lack of access to early screening services. African American and Latina (Puerto Rican) women were most likely to have received substandard and inappropriate treatment. African American, Native American, and Hispanic White women faced a 10 percent to 70 percent greater risk of dying after a breast cancer diagnosis than did non-Hispanic White women (American Cancer Society, 2003).

The age-adjusted death rate for female breast cancer in California was 23.4 per 100,000 females in 2001-2003, down from 25.2 in 1999-2000. In the Central Coast, all counties were below the state rate and all counties, except Ventura County were below the *Healthy People 2010* objective of 22.3 (CA Department of Health Services, 2003). (Figure 84).

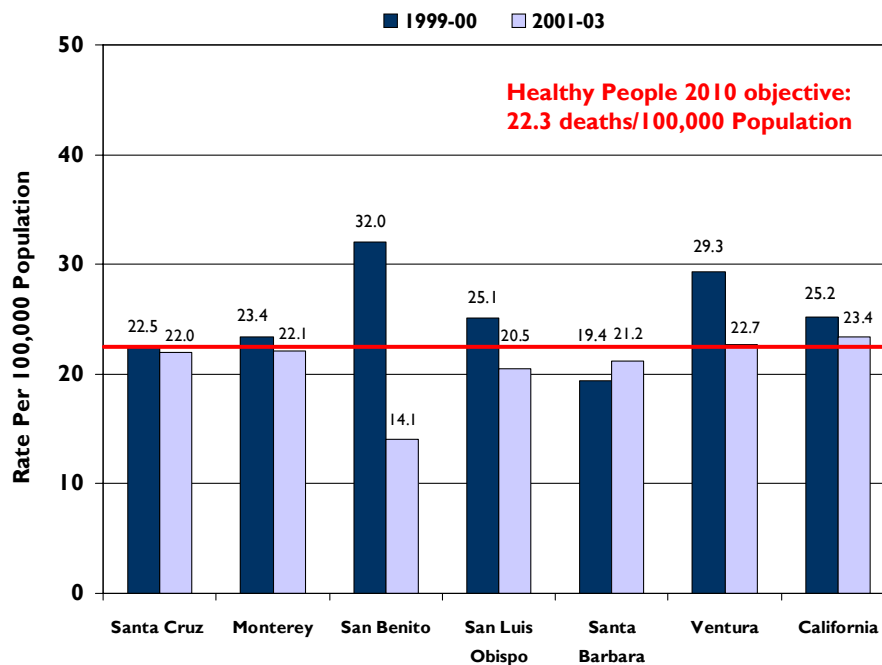


Figure 84: Age-Adjusted Death Rates Due to Breast Cancer in Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

E. MENTAL HEALTH

Approximately 20 percent of the U.S. population is affected by mental illness during a given year, with depression being the most common disorder. According to *Healthy People 2010*, major depression is the leading cause of disability and is the cause of more than two-thirds of suicides each year. The stigmatization and misunderstanding of mental illness prevent many persons with depression from seeking professional help. Depression is also related to other medical conditions, such as heart disease, cancer, and diabetes, as well as anxiety and eating disorders. Alcohol and illicit drug abuse have also been associated with depression. An estimated 8 million persons, aged 15-54 years, had coexisting mental health and substance abuse disorders in 1999. (*Healthy People 2010*, 2000).

Perceived Mental Health and Treatment

Approximately one in six (15.9%) Central Coast adults reported that they had felt they needed mental health treatment in the year prior to the 2001 CHIS, a rate similar to the state rate. However, only 8.7 percent of adults in the Central Coast saw a mental health professional, which is slightly more than half of the percentage of adults who thought they needed mental health treatment. (Figure 85).

Latinos and whites felt that they needed mental health help at approximately the same rates, but lower income adults reported a higher need than those with more income (19.8% of adults under FPL and 14.3% for adults over 300% FPL). Non-citizens (17.9%) reported a slightly higher need for mental health than U.S. citizens (15.9%). (Figure 86).

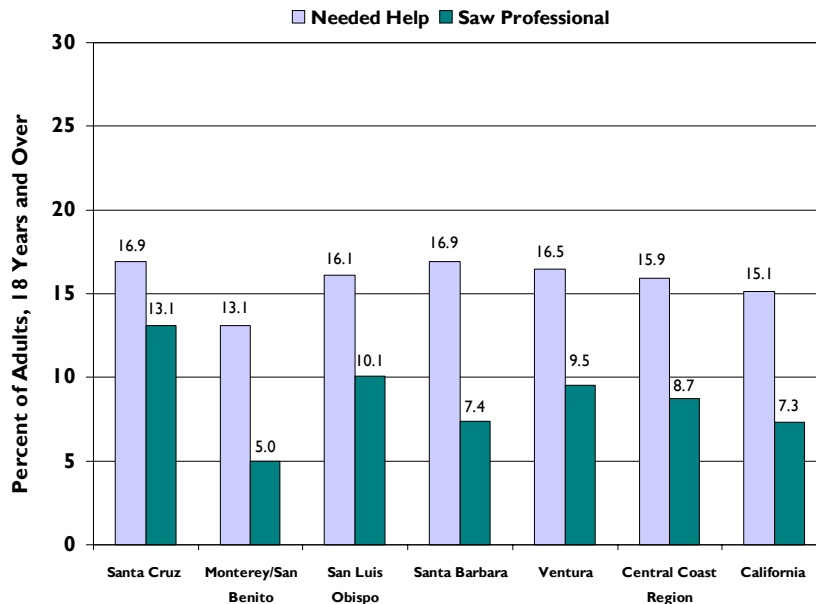


Figure 85: Percentage of Adults Who Needed Help and Sought Help for Emotional/Mental Health, Central Coast Region, 2001

Source: 2001 CHIS; UCLA Center for Health Policy Research, 2005

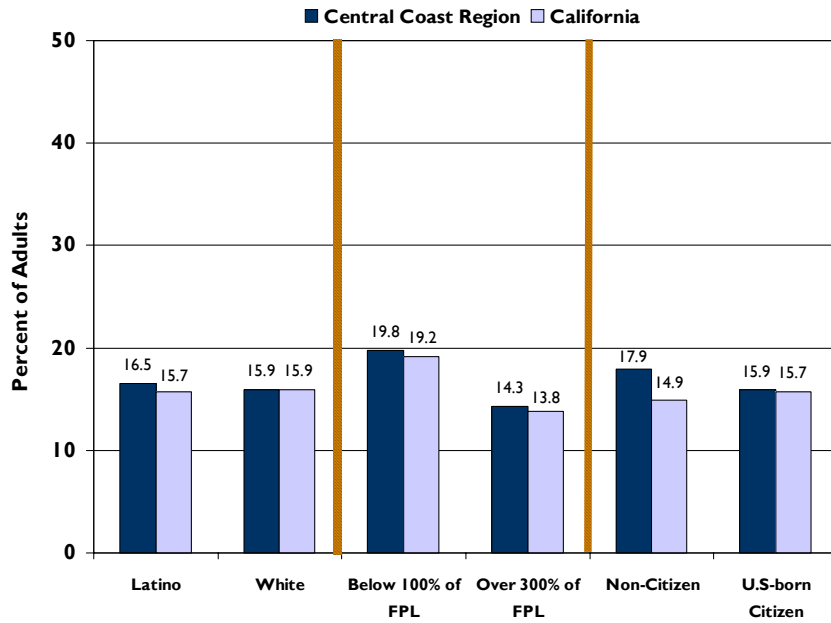


Figure 86: Percentage of Adults Who Needed Help for Emotional/Mental Health by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001

Source: 2001 CHIS; UCLA Center for Health Policy Research, 2005

Over one in five Central Coast adolescents reported feeling sad or downhearted in the past 12 months, according to CHIS 2001. The rates ranged from 16.7 percent in Monterey/San Benito to 26.6 percent in Santa Barbara County. The California rate was 19.2 percent. The California Healthy Kids Survey showed that nearly one-third of children in Central Coast counties felt sad or hopeless in the past 12 months. (Figure 87)

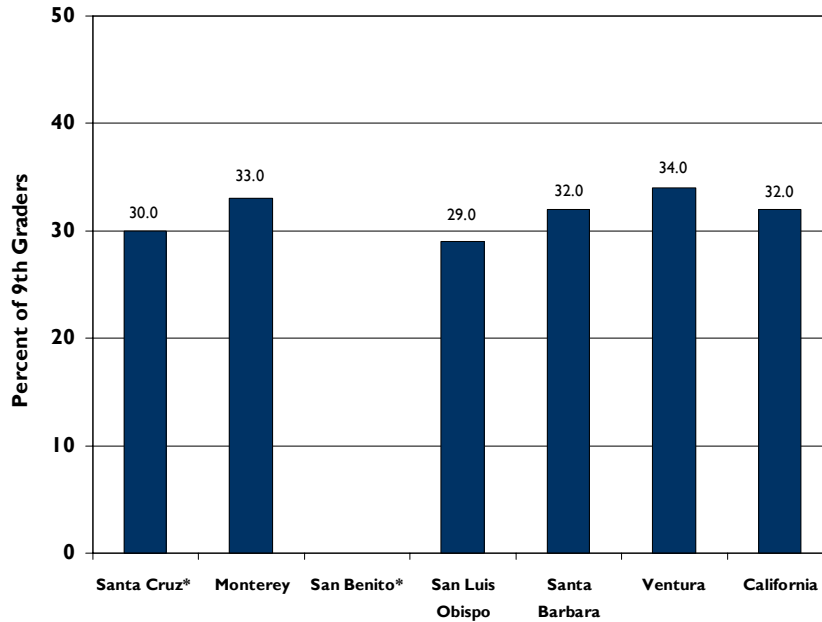


Figure 87: Percentage of Ninth Graders Who Felt Sad or Hopeless in the Past 12 Months, Central Coast Region, 2003

Source: CA Healthy Kids Survey, 2004

*Santa Cruz County data are from 2001; San Benito County data were unavailable.

Suicide

Suicide was the ninth leading cause of death in the United States in 2002. In the decade prior to 2003, the percentage of high school students who reported attempting suicide (8–9 percent) and whose suicide attempts required medical attention (just under 3 percent) remained fairly constant. Girls were more likely than boys to consider or attempt suicide. However, in 2002 adolescent boys (15–19 years of age) were five times as likely to die from suicide as were adolescent girls, in part reflecting their choice of more lethal methods, such as firearms (CDC, 2005b).

Several Central Coast counties had death rates due to suicide higher than the state rate of 9.5 deaths per 100,000 persons in 2001-2003. San Luis Obispo County and Santa Cruz had the highest suicide rates of 13.4 and 13.0, respectively. The age-adjusted suicide rate in all of the Central Coast counties exceeded the *Healthy People 2010* national objective of 5.0 deaths per 100,000 persons. Except for Santa Barbara, each county's suicide death rate has increased since 1999-2000. (Figure 88).

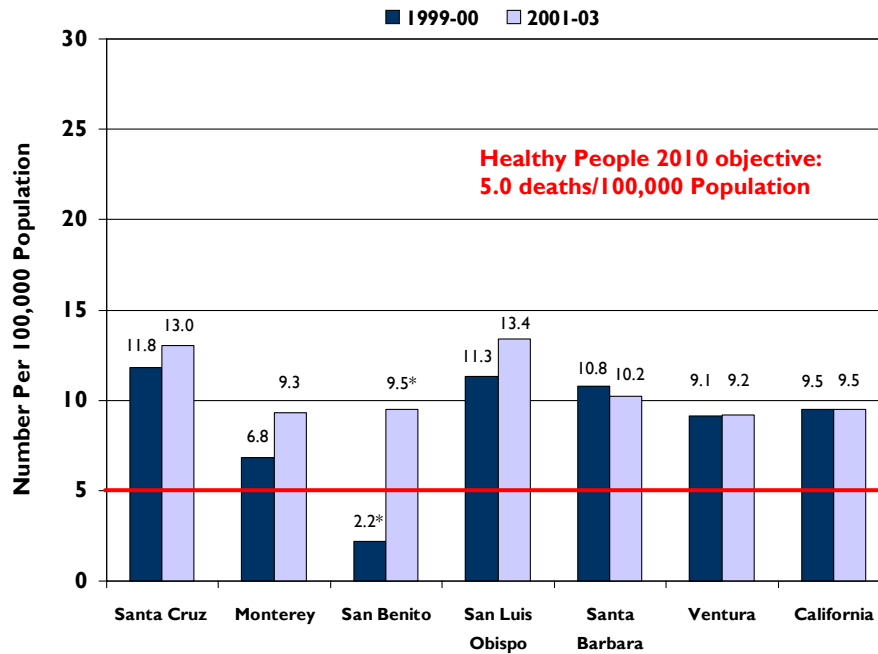


Figure 88: Age-Adjusted Death Rates due to Suicide, Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

*The rates are unreliable; relative standard error greater than or equal to 23%.

F. SUBSTANCE ABUSE

Alcohol Abuse

Substance abuse, primarily alcohol abuse, is one of society’s most pervasive health and social concerns. According to *Healthy People 2010*, approximately 100,000 deaths annually in the United States are related to alcohol consumption. Illicit drug abuse and related AIDS deaths account for at least another 12,000 deaths. In 1995, the economic cost of alcohol and drug abuse was estimated to be \$276 billion; this includes the costs of health care, motor vehicle accidents, crime, lost productivity, and other adverse outcomes of alcohol and drug abuse. This amount represents more than \$1,000 for every man, woman, and child in the United States (*Healthy People 2010*, 2000).

Six out of ten Central Coast adults (62.4%) reported drinking alcohol in the month preceding the CHIS surveys, a slightly higher rate than the state (57.6%). Although most drinkers are light or moderate drinkers, binge drinking (consuming more than five drinks at a single time) is at a high level in the region. According to the CHIS surveys, 17 percent of adults and 8.6 percent of adolescents admitting binge drinking in the past month. Both of these rates are slightly higher than the state rates. (Figure 89). Also, young adults were far more likely to binge drink than middle aged adults (30.7% of adults ages 18-24 years and 14.1% of adults ages 40-64 years). (Figure 90).

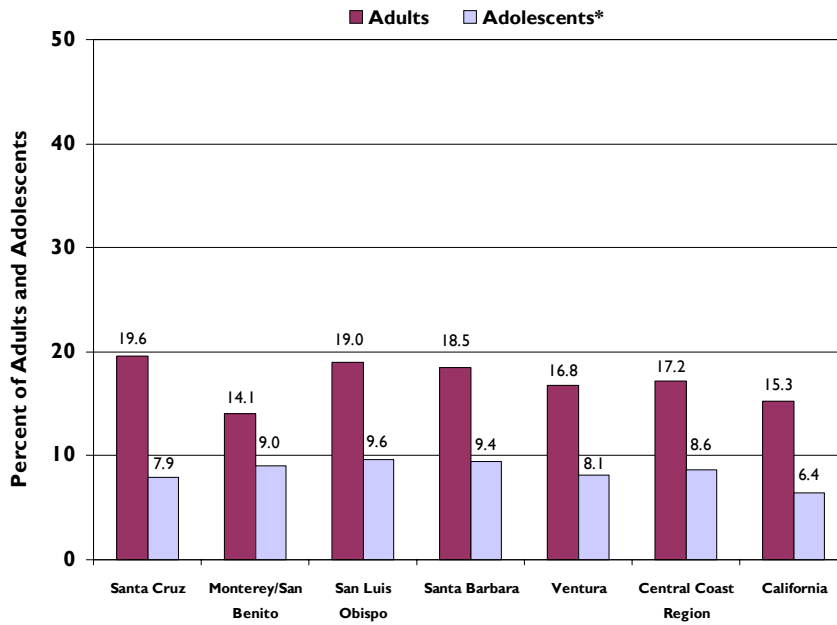


Figure 89: Percentage of Adults and Adolescent, 11-17 years, Who Binge Drank (5+ drinks at one time) in the Past Month, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

*Adolescent/Teen data were from 2003 only.

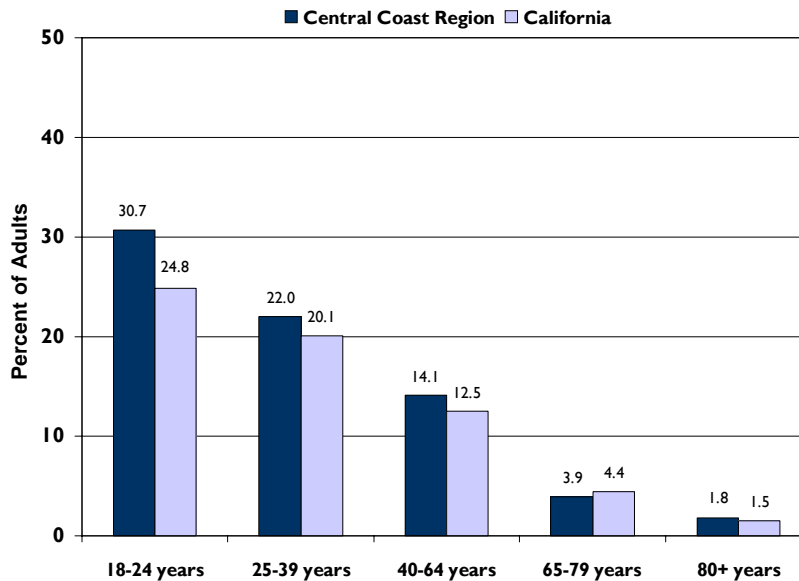


Figure 90: Percentage of Adults who Binge Drank (5+ drinks at one time) in the Past Month by Age Group, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Tobacco Use

Cigarette smoking is the single most preventable cause of disease and death in the United States. According to *Healthy People 2010*, smoking results in more deaths each year than do AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle accidents, and fires combined. Smoking is a major risk factor for the leading causes of death, such as heart disease, stroke, lung cancer, and chronic lung diseases. Furthermore, smoking by women during pregnancy can result in miscarriages, premature delivery, and sudden infant death syndrome (*Healthy People 2010*, 2000).

Data from *Healthy People 2010* show that tobacco use is responsible for more than 430,000 deaths per year among adults in the United States, representing more than five million years of potential life lost. If tobacco use patterns persist in the United States, an estimated five million persons who are currently under age 18 years will die prematurely from a smoking-related disease. Direct medical costs related to smoking total at least \$50 billion per year and direct medical costs related to smoking during pregnancy are approximately \$1.4 billion per year (*Healthy People 2010*, 2000).

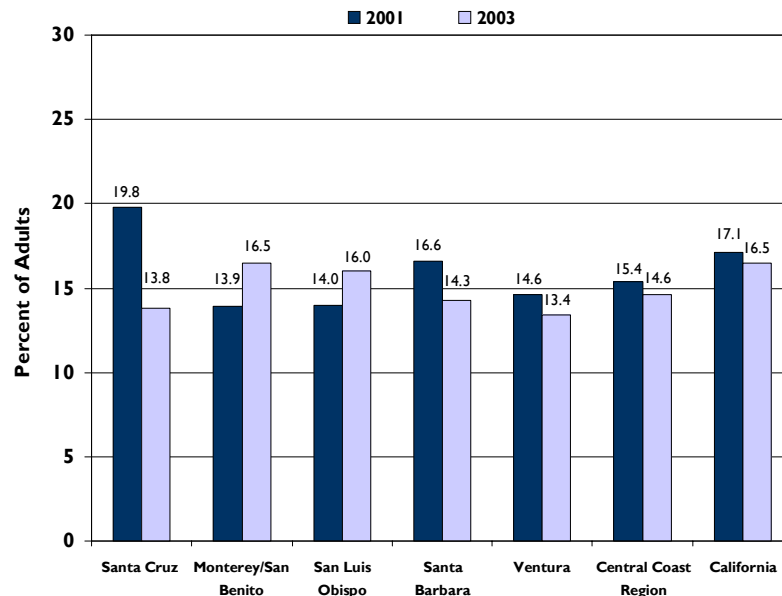


Figure 91: Percentage of Adults who Currently Smoke, Central Coast Region, 2001 and 2003

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

CHIS reports that one in seven (14.6%) Central Coast adults reported being a current smoker, down slightly from 15.4 percent in 2001. The percentage of California adults who smoked in 2003 was 16.5. All counties, except Monterey County showed a decrease in smoking rates between 2001 and 2003. The Central Coast is close to achieving the *Healthy People 2010* national objective of 87.0 percent non-smokers. The Central Coast teenage smoking rate (6.6%) for 2003 is slightly higher than the California rate of 5.8 percent. (Figure 91).

In California overall, whites were slightly more likely to smoke than whites (17.3% of whites smoke compared to 14.5% of Latino), yet the rates were comparable in the Central Coast region. Low income adults also were also more likely to smoke in the Central Coast (18.1% of adults under 100% of FPL and 11.3% of adults over 300% of FPL). By age group, young adults, ages 18-24, more often smoked

(20.2% in the Central Coast and 18.5% in California), yet in the Central Coast region the smoking rates generally decreased in the following age groups. (Figure 92 and Figure 93).

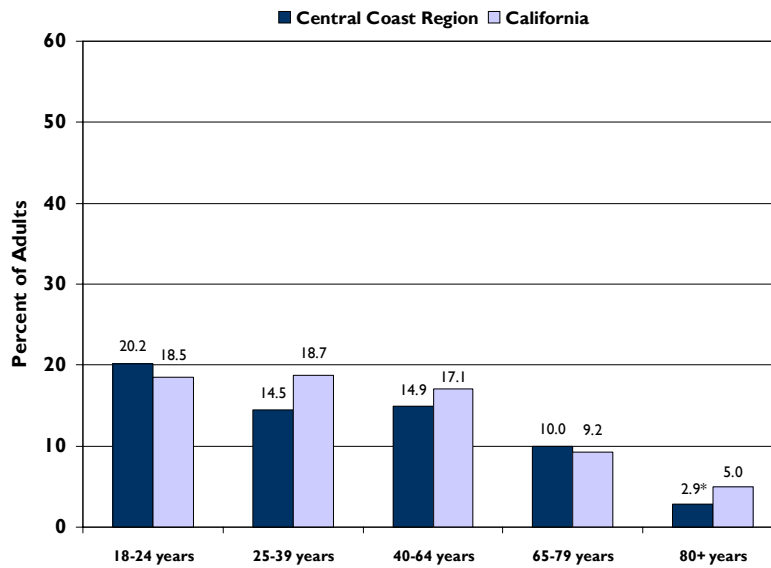


Figure 92: Percentage of Adults Who Currently Smoke by Age Group, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

*The percentage is unstable due to small sample size and should be interpreted with caution.

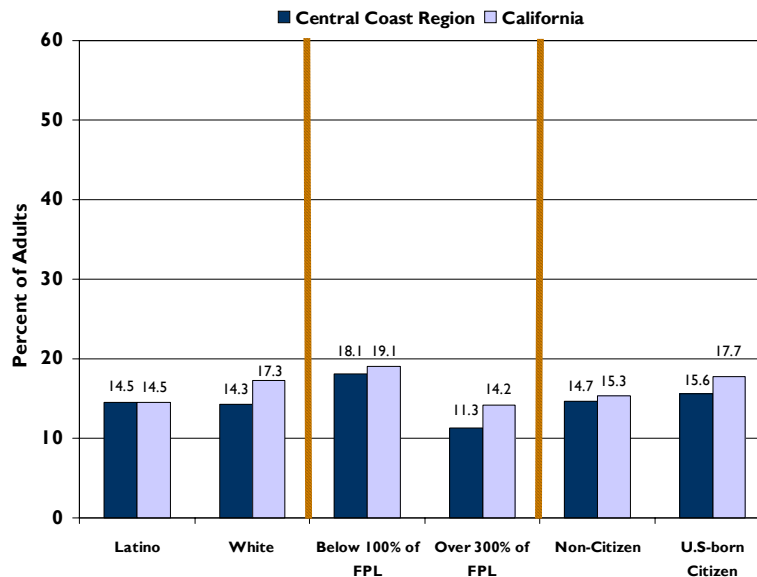


Figure 93: Percentage of Adults Who Currently Smoke by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

G. VIOLENCE

Violent Crimes

Violence continues to be a leading cause of injury and death worldwide for people aged 15-44. Moreover, although many forms of violence garner national concern and resources, much more violence occurs in private domains and receives less attention. These hidden health hazards silently drain our nation's human, economic, and health resources (National Online Resource Center on Violence Against Women, 2006).

According to data maintained by the CA Department of Justice's Criminal Justice Statistics Center, the rate of violent crimes (homicide, forcible rape, robbery, and aggravated assault) per 100,000 population has been decreasing since 1994. California's rate decreased by 74 percent, from 992.4 to 569.4 per 100,000 population in 2003. Violent crime rates in 2003 in the Central Coast counties continue to be lower than the state rate, ranging from 490.4 in Monterey County to 247.8 in San Luis Obispo County. San Luis Obispo County also demonstrated the most dramatic reduction in the violent crime rate since 1994 with a reduction of 155 percent. (Figure 94).

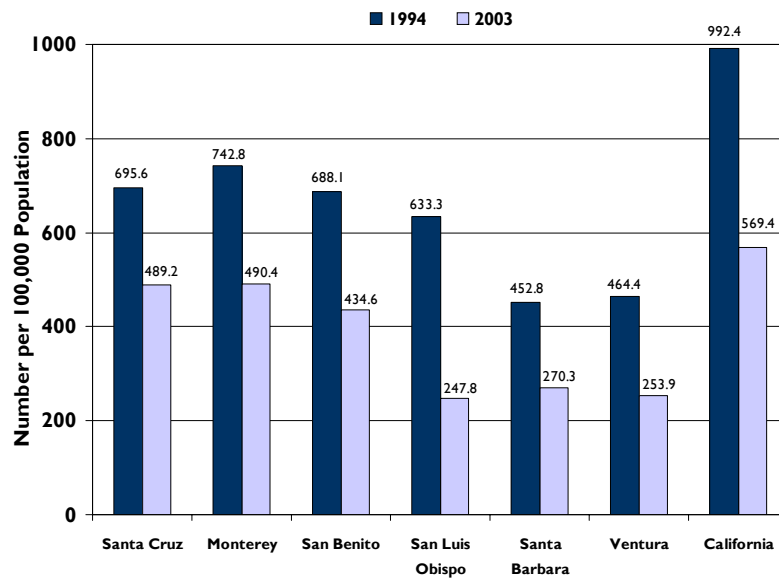


Figure 94: Number of Violent Crimes* per 100,000 Population, Central Coast Region, 1994-2003

Source: California Department of Justice, 2006a

*Violent Crimes includes homicide, forcible rape, robbery, and aggravated assault.

Domestic Violence

According to the California Attorney General domestic violence is a major problem in California. Domestic violence most often refers to intimate partner violence and includes violence between spouses, individuals in dating relationships, and former partners or spouses. It can occur inside or outside the home. Domestic violence often involves a pattern of coercive behavior that includes physical, sexual, verbal, emotional and psychological abuse (CA Attorney General's Crime and Violence Prevention Center, 2006).

One indicator of the level of domestic violence is the number of calls to law enforcement authorities for assistance. There were no clear trends in reports of domestic violence. The trend in California was slightly downward. In some counties, calls for assistance went down, while in others the rate went up in the period from 2000 to 2003. Of note was Ventura County where the already high number of calls increased between 2000 and 2003. (Figure 95).

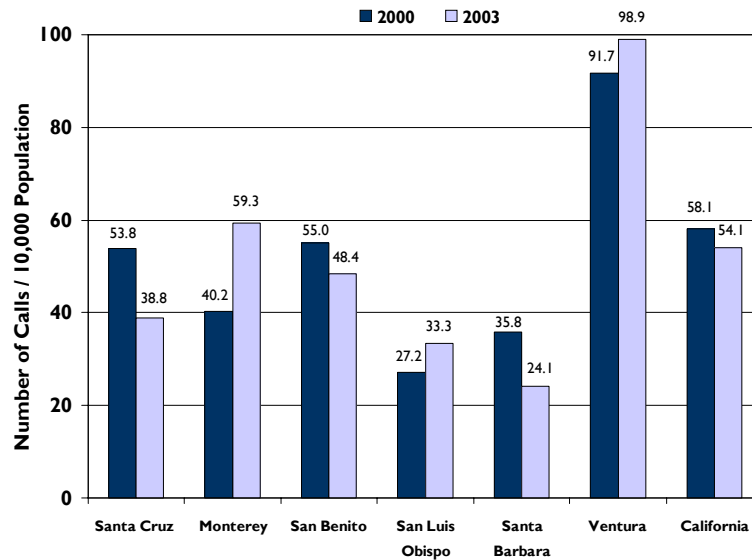


Figure 95: Number of Domestic Violence Related Calls for Assistance, Central Coast Region, 2000-2003

Source: CA Department of Justice, 2005b

H. MOTOR VEHICLE DEATHS

Motor vehicle accidents are a major source of injury and death. Nationally, death rates associated with motor vehicle traffic injuries are highest in the age group 15 to 24 years. In 1996, teenagers accounted for only 10 percent of the U.S. population but 15 percent of the deaths resulting from motor vehicle accidents, according to *Healthy People 2010*. Those aged 75 years and older had the second highest rate of motor-vehicle-related deaths. Increased use of safety belts and reductions in driving while impaired have been demonstrated to be the most effective means to reduce the risk of death and serious injury in motor vehicle crashes (*Healthy People 2010*, 2000).

Deaths due to motor vehicle accidents in all Central Coast counties were at or below the state age-adjusted rate of 12.0 per 100,000 persons for 2001-2003, except for Monterey County. The death rates ranged from 14.0 in Monterey County to 9.5 in Santa Barbara County. (The rate for San Benito County was statistically unstable.) All counties were below the *Healthy People 2010* national objective of 9.2 age-adjusted deaths per 100,000 persons (CA Department of Health Services, 2005). (Figure 96).

Approximately 30 percent of the Central Coast deaths due to motor vehicle accidents had driving under the influence of alcohol as a factor in 2004, down from 40 percent in 1999. (Figure 97). Also, seat belts were not used in 37 percent of deaths due to motor vehicle accidents (CA Highway Patrol, 2005).

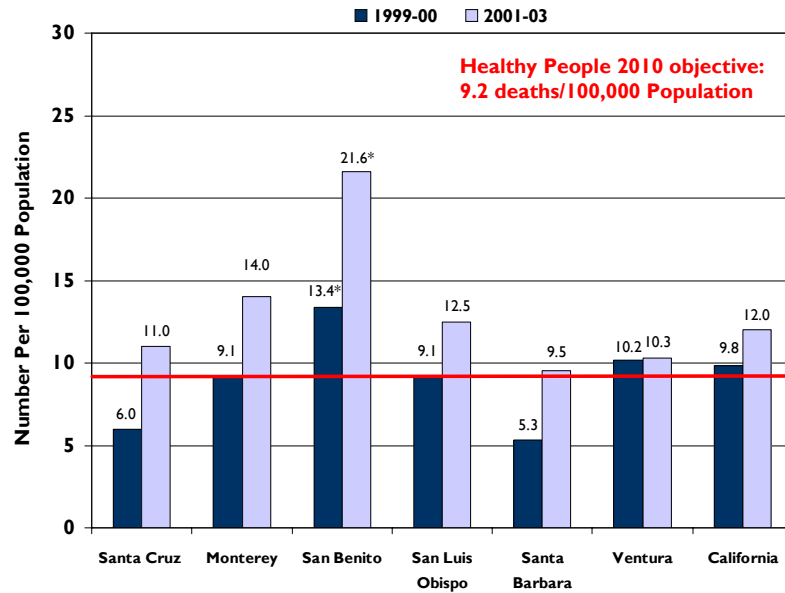


Figure 96: Age-Adjusted Death Rates Due to Motor Vehicle Accidents, Central Coast Region, 1999-2000 and 2001-2003

Source: CA Department of Health Services, 2005

*The rates are unreliable; relative standard error greater than or equal to 23%.

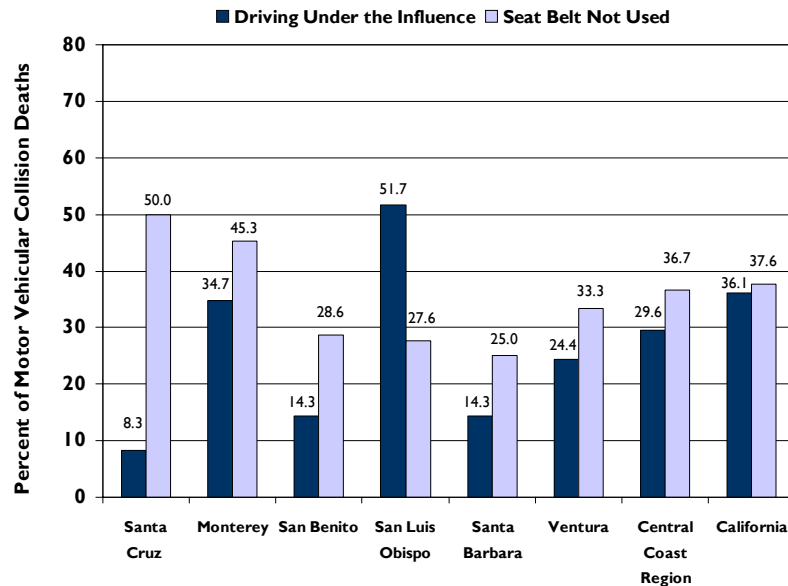


Figure 97: Percentage of Motor Vehicle Deaths with Driving Under the Influence and Seat Belt Not Being Used as a Factor, Central Coast Region, 2004

Source: CA Highway Patrol, 2005



USE OF HEALTH AND SOCIAL SERVICES IN THE CENTRAL COAST

A major determinant of health is the appropriate use of health services. Disease screenings and primary care can provide for early diagnosis and treatment and prevent conditions from becoming worse. These visits also provide an opportunity for health education thus reducing the risk of disease. Presented below are indicators of the use of health services, preventive screenings, and nutrition programs providing policy makers with an indication of the penetration of available resources into the public, and an opportunity to enhance the underutilized services.

A. CARE-SEEKING BEHAVIOR

Usual Source of Primary Care

Having a usual source of primary care is an important component of receiving appropriate health services, including specialty care. A usual source of primary care also promotes continuity of care, comprehensiveness of care and coordination of care. Evidence suggests that first contact care provided by an individual's primary care provider leads to less costly medical care in the future (*Healthy People 2010*, 2000).

Overall, one in seven Central Coast adults (14.2%), 18 years and over, reported not having a usual source of primary health care, comparable to the rate in California (14.0%). (Figure 98). However, four out of ten (41.3%) residents, 0-64 years, without health insurance did not have a usual source of care. Latinos are more than twice as likely to not have a usual source of care (23.4% of Latino and 10.2% of whites). And, lower income residents were almost three times more likely than wealthier residents to not have a usual source of care (23.8% under FPL and 8.2% over 300% FPL). (Figure 100).

Most Central Coast adults (65.2%), 18 years and over, had a physician or an HMO as their usual source of care, with a range from 57.8 percent in Monterey/San Benito to 71.5 percent in Ventura County. In Santa Cruz County, 23.1 percent of adults reported that they had a clinic as their usual source of care. Conversely, only 12.6 percent of Ventura County adults and 13.6 percent of San Luis Obispo County adults reported using a clinic as their primary source of care (CHIS).

Nearly all children in the region were reported to have a usual source of care, however one in six uninsured children (16.6%) and 17.5 percent of children under the poverty level did not have a usual source of care. One in seven Latino children (13.8%) did not have a usual source of care. However, this comparison data should be used with caution as it is unstable due to small sample size.

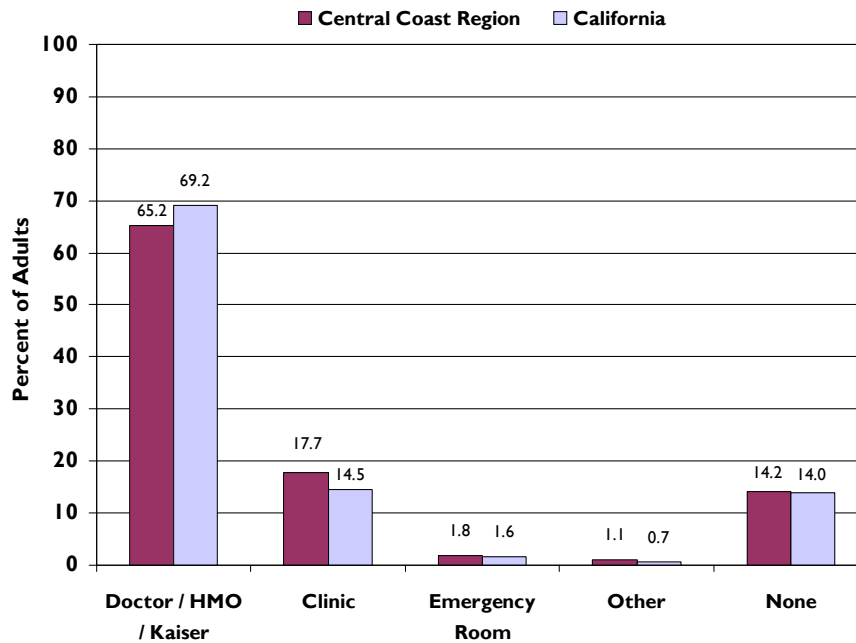


Figure 98: Percentage of Adults by Usual Source of Health Care, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

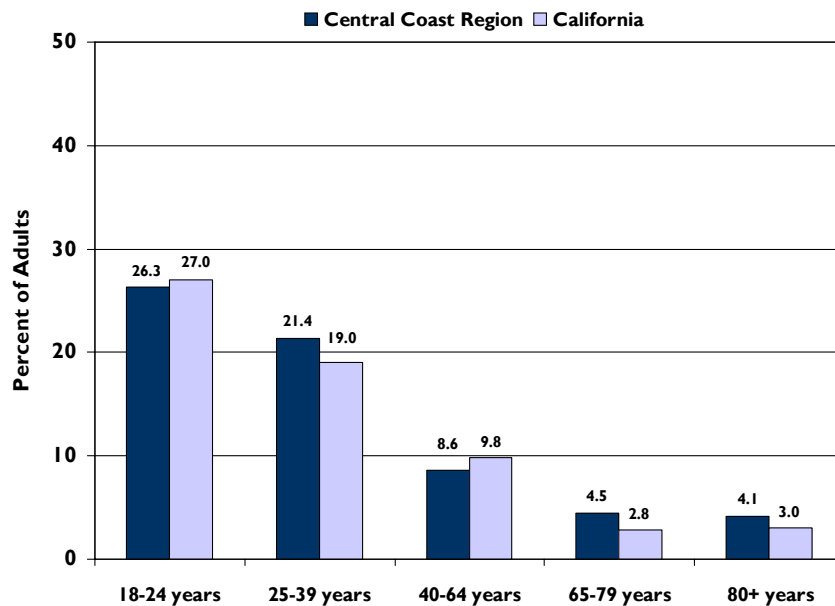


Figure 99: Percentage of Adults Without a Usual Source of Health Care by Age Group, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

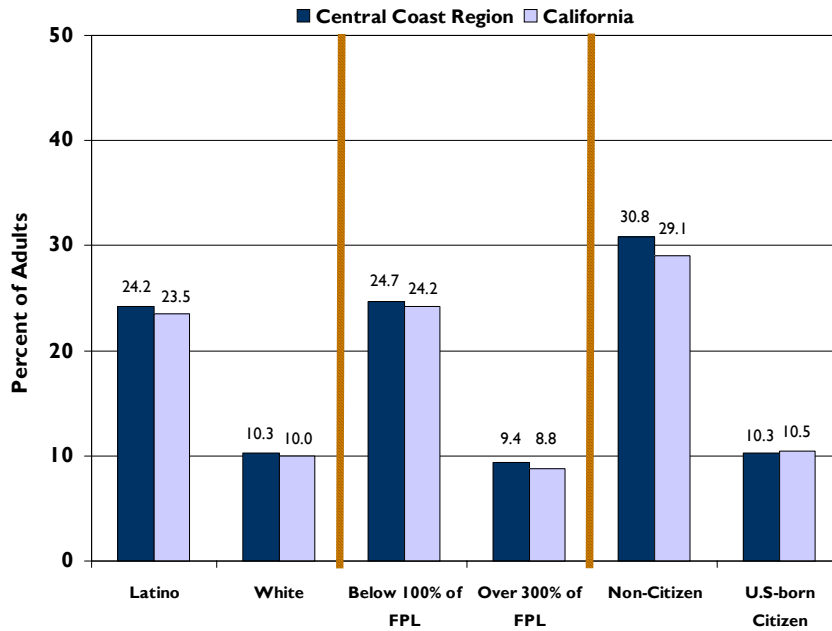


Figure 100: Percentage of Adults Without a Usual Source of Health Care by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Delayed/Foregone Care

Early and continuous care when symptoms first arise can often prevent conditions from becoming more serious requiring more intensive and expensive treatments. Nearly one in seven adults on the Central Coast (14.9%) said that they had delayed or foregone care in the past year. This is similar to the state rate of 14.0 percent. (Figure 101). Young adults, ages 18-24, were the most likely to forego care (20%), as were the uninsured (20.7 percent), and whites (17.1 percent). The most common reason for delaying/foregoing care was “forgot” (36.3 percent), while the cost of care was cited by 13.2 percent of those who did not get care. Santa Cruz had the highest percentage of residents who reported that they delayed or did not get care (21.5%).

There appeared to be ethnic and immigration disparities among those who delayed or forewent care, which may indicate different understanding of recommended preventive care screening practices. However, there was no apparent disparity based on income. (Figure 102).

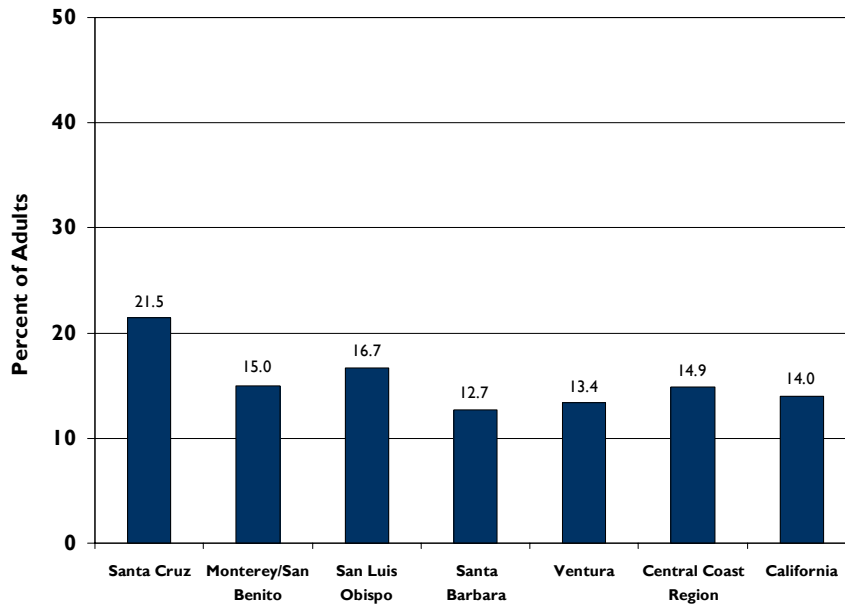


Figure 101: Percentage of Adults, 18 Years and Over, with Delayed or Foregone Care, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

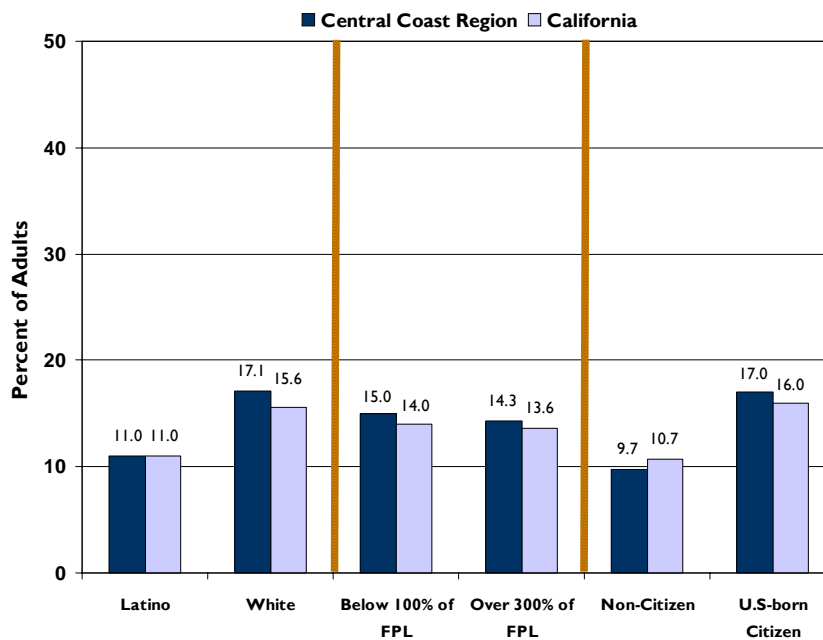


Figure 102: Percentage of Adults, 18 Years and Over, with Delayed or Foregone Care by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Avoidable Hospitalization Rates

Comprehensive primary care services can reduce the severity of certain illnesses and can often prevent hospitalization for ambulatory-care-sensitive (ACS) conditions. ACS conditions include asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes mellitus, and hypertension. Without appropriate access to and use of primary and preventive care, these diseases can result in acute conditions requiring hospitalization. High hospital admission rates for ACS conditions serve as an indicator for both limited access to primary care and for low-quality primary care.

There is wide disparity among the Central Coast counties in hospital discharges for ACS conditions. For example, in 2003, hospitalizations for hypertension varied more than three-fold between the San Luis Obispo County with the lowest rate (9.8 discharges per 100,000 persons) and Monterey/San Benito Counties with 35.9 discharges per 100,000 persons. Similarly, hospitalizations for diabetes were three times higher in Monterey/San Benito (102.1 per 100,000 persons) than for Ventura County (33.3 per 100,000 persons). Although there was variation among the counties for pediatric asthma and chronic obstructive pulmonary disease, all Central Coast counties were below the state rate. (Table 24).

Table 24: Inpatient Hospital Discharge Rates for Selected Ambulatory-Care-Sensitive Conditions, 2003

County	Rate per 100,000 Persons			
	Hypertension	Pediatric Asthma	Diabetes – Short term / Uncontrolled	Chronic Obstructive Pulmonary Disease
Santa Cruz	17.7	83.8	52.6	128.2
Monterey/San Benito	35.9	79.6	102.1	166.8
San Luis Obispo	9.8	85.0	49.8	112.5
Santa Barbara	16.2	58.8	44.1	99.6
Ventura	28.3	92.7	33.3	126.3
California	30.3	134.2	60.6	185.3

Source: CA OSHPD, 2005a

Caution must be exercised in using county level hospital discharge rates, particularly for smaller counties, since the rates are less consistent with some variation over time. Rates for the period of 1997 to 2003 may be obtained from CA OSHPD (Parker, 2005).

Cancer Screening

According to *Healthy People 2010* several types of cancer can be prevented and the prospects for surviving cancer continue to improve with timely detection and treatment. The ability to reduce cancer death rates depends, in part, on providing culturally and linguistically appropriate information regarding prevention, early detection, and treatment to the public and to health care professionals (*Healthy People 2010*, 2000).

Cervical Cancer Screening

Cervical cancer is one of the most successfully treated cancers when detected at an early stage. Yet 3,700 women are expected to die from cervical cancer in 2005. Ethnic and racial disparities in the incidence of cervical cancer exist since white women are more likely to undergo earlier screening when pre-invasive lesions are easily treatable (American Cancer Society, 2005).

According to CHIS, nearly all Central Coast women over the age of 18 years (83.7%) had a Pap smear within the past three years, similar to the statewide rate. Only 7.3 percent of adult women reported never having a Pap smear. (Figure 103).

In the Central Coast, Latinas and Asian women were much more likely than white women to have never had a Pap smear (15% of Latinas, 14.8% of Asian women and 3.8% of white women). Also, the lowest income women were five times as likely to have never had a Pap smear (17.3% under 100% of FPL and 3.5% over 300% of FPL). Young adult women, ages 18-24, (30.9%) were the most likely to have never had a Pap smear. (Figure 104).

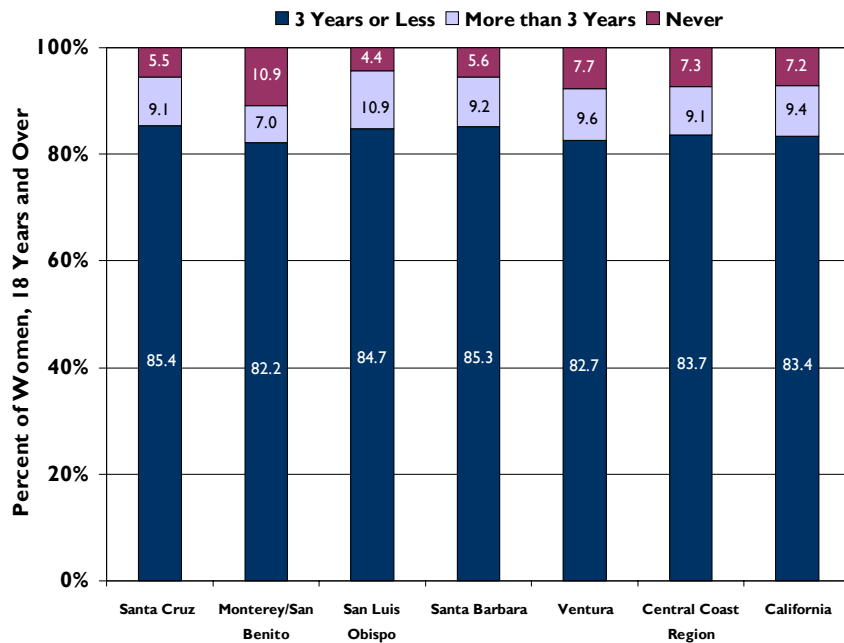


Figure 103: Percentage of Women, 18 Years and Over, by Timing of Last Cervical Cancer Screening, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

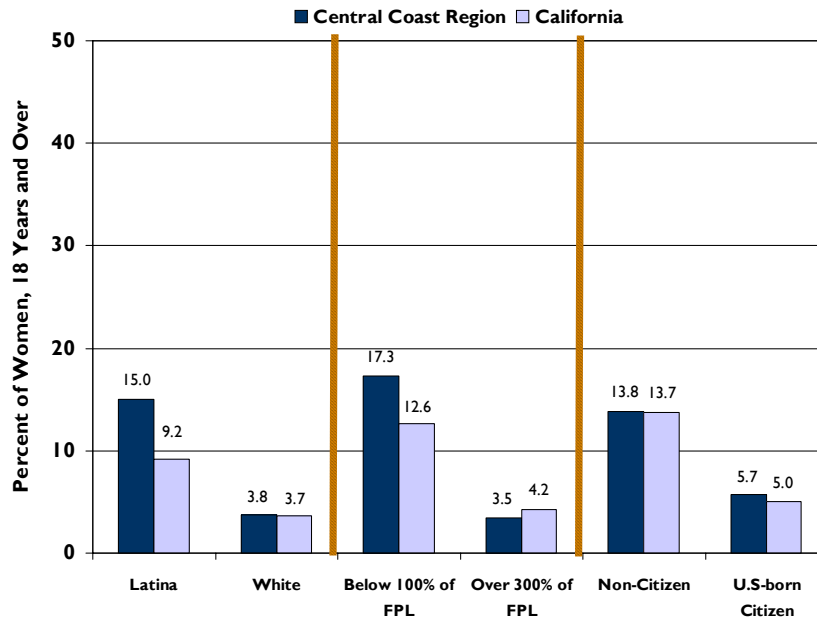


Figure 104: Percentage of Women, 18 Years and Over, Never Had Cervical Cancer Screening, by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Breast Cancer Screening

Breast cancer is the most common cancer among women in the United States. Approximately 211,000 women were expected to be diagnosed with breast cancer in 2005, and 40,410 U.S. women were expected to die from breast cancer in 2005 (American Cancer Society 2005). Early detection can substantially reduce the possibility of death from breast cancer. National experts agree that mammography is the most effective method for detecting early malignancies and that breast cancer deaths can be reduced through increased adherence to recommendations for regular mammography screening (*Healthy People 2010*, 2000).

Rates for breast cancer screenings in the Central Coast were similar to those of the state: 26.6 percent of Central Coast women over 30 years of age reported they never had a mammogram; 61.4 percent of adult women over age 30 in the region reported they had a mammogram within the past two years (CHIS). (Figure 105).

There are wide ethnic disparities on the use of mammograms in the Central Coast: over four out of ten Latinas (43.3%), one third (32.1%) of Asian-American and one-quarter (27.1%) of African-American women over age 30 reported that they had never had a mammogram, compared to 21.2 percent of white adult women. In addition, low income women were more likely to not have had a mammogram (36.4% of women under FPL and 22.5% of women over 300% FPL). Immigrants were also less likely to have had a mammogram -- 48.1 percent of non-citizen women have never had a mammogram, while only 22.9 percent of U.S. born women had not had the screening. (Figure 106).

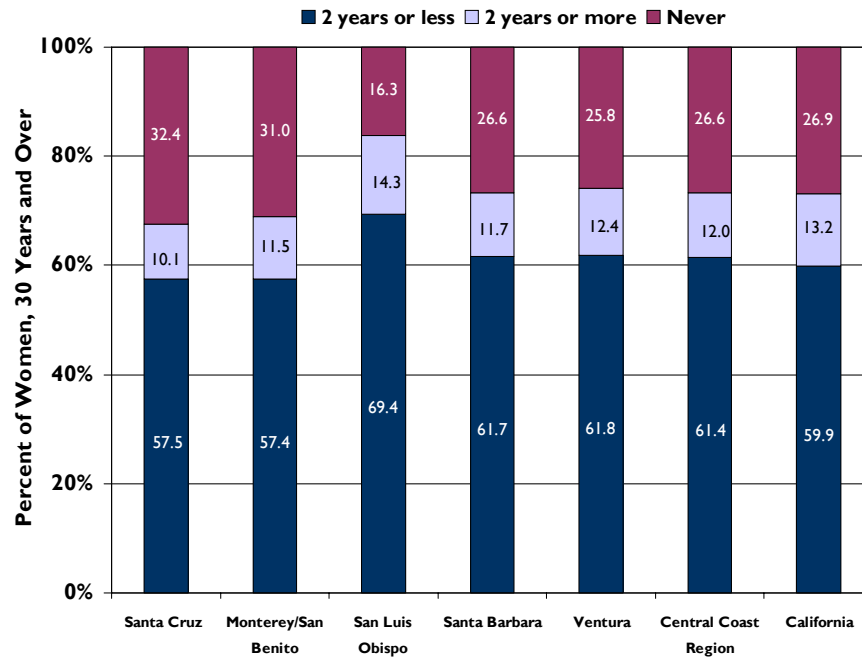


Figure 105: Percentage of Women, 30 Years and Over, by Timing of Last Mammogram, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

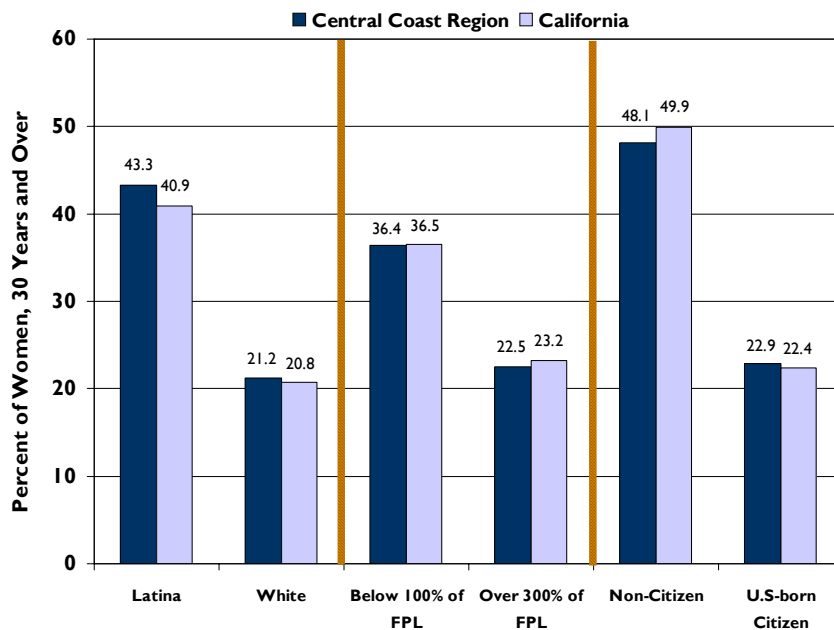


Figure 106: Percentage of Women, 30 Years and Over, Never Had Mammogram by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Colorectal Cancer Screening

Colorectal cancer (CRC) is the second leading cause of cancer-related death in the United States. In 2003, there were expected to be 145,290 cases of CRC and 56,290 deaths from CRC, accounting for approximately 10 percent of cancer deaths. Current guidelines recommend that beginning at age 50, men and women who are at average risk for developing colorectal cancer begin screening (American Cancer Society, 2005).

The colorectal screening rate for Central Coast adults over age 40 was the same as that of California. In the region and in the state, 38.8 percent of residents over 40 had a colorectal screening within the past year (CHIS). (Figure 107). Colorectal screening was more prevalent among white adults over age 40 in the region. While 38.6 percent of whites had never had a colorectal screening, 73 percent of Latinos had not. Also, lower income persons and immigrants were less likely to have never been screened for colorectal cancer (69.4% of persons under 100% of FPL and 82.3% of non-citizens). (Figure 108).

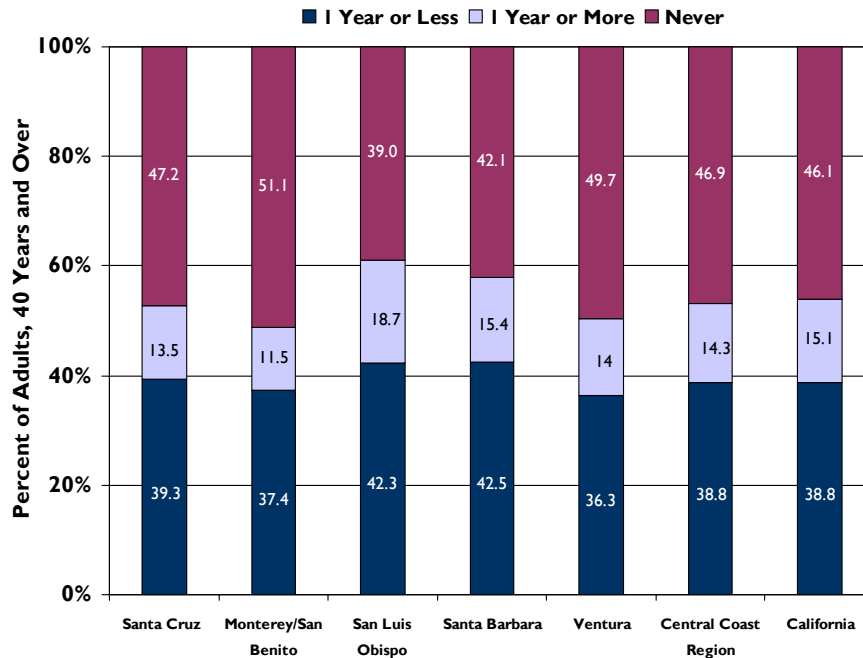


Figure 107: Percentage of Adults, 40 Years and Over, by Timing of Last Colorectal Cancer Screening, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

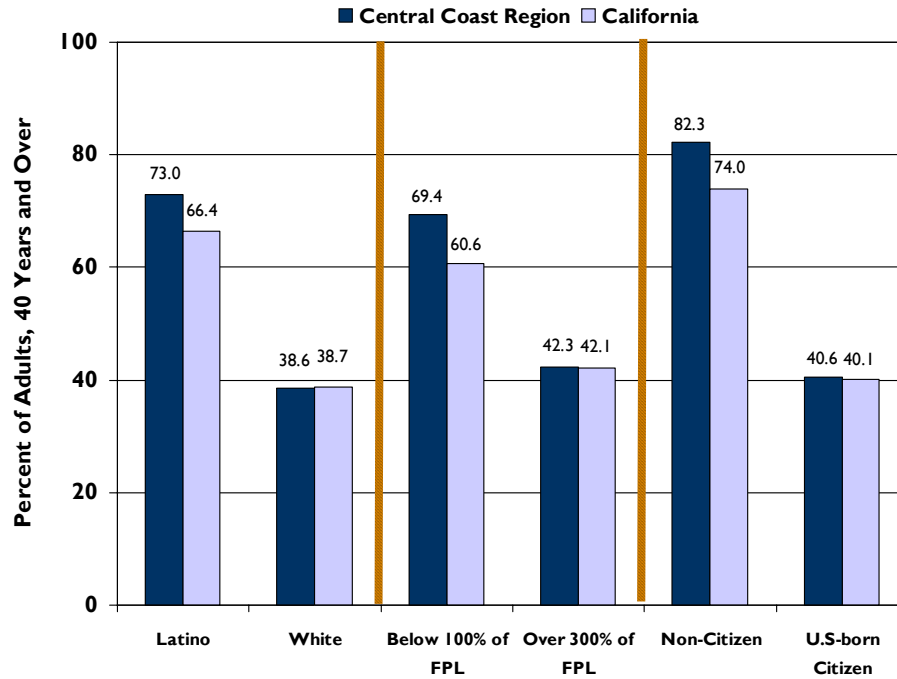


Figure 108: Percentage of Adults, 40 Years and Over, Never Had Colorectal Cancer Screening by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined
 Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Prostate Cancer Screening

Prostate cancer is the most commonly diagnosed form of cancer (other than skin cancer) in males and the second leading cause of cancer deaths among males in the United States. Approximately 80 percent of all cases of prostate cancer are among men who are 65 years and older. Prostate cancer incidence rates are much higher for African-American men than for white men. Prostate cancer was expected to account for an estimated 232,090 cases and 30,350 deaths in 2005. Digital rectal examination and the prostate-specific antigen (PSA) test are two commonly used methods for detecting prostate cancer and are recommended to be offered to men beginning at age 50 (American Cancer Society, 2005).

In the CHIS surveys, men 40 years and older were asked if they had ever had a PSA test. Nearly half of men (46.9%) on the Central Coast and in California (46.1%) had never had a PSA test. (Figure 109). Racial disparities also exist in the frequency of PSA testing for prostate cancer. While nearly one-half of white males (46.3%) in the survey reported not having a PSA test, 82.1 percent of Latino males had never had the test. As with other screenings, poor residents were more likely to have not had the test (81.1% of men under 100% of FPL did not have the test compared to 46.5% of men over 300% of FPL). Very few immigrants had the test (86.7% of non-citizens never had a PSA test, compared to 48.6% of U.S.-born residents). (Figure 110).

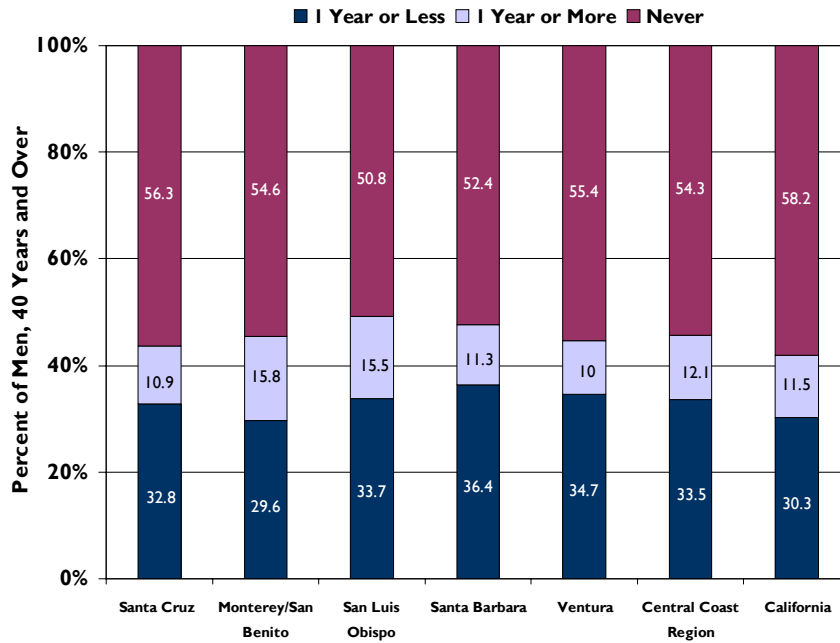


Figure 109: Percentage of Men, 40 Years and Over, by Timing of Last Prostate Cancer Screening, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

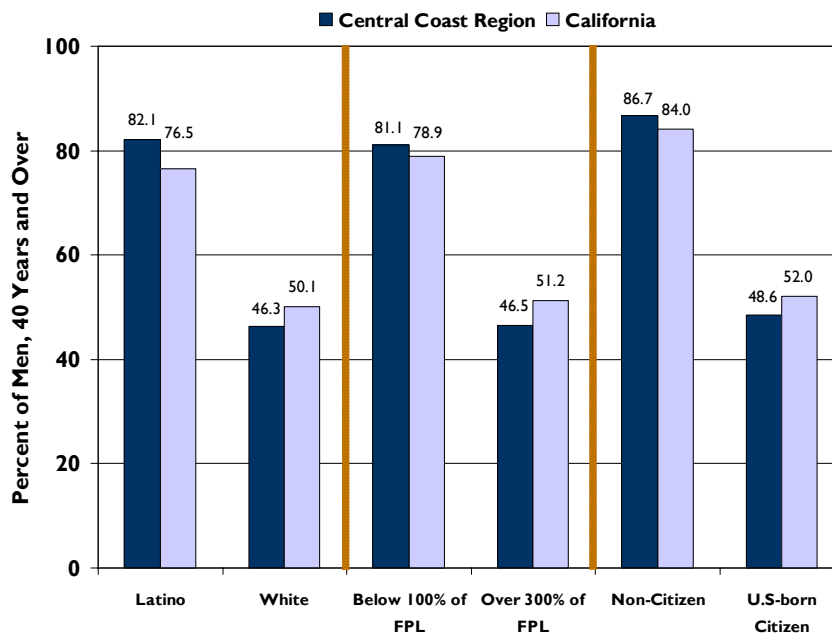


Figure 110: Percentage of Men, 40 Years and Over, Never Had Prostate Cancer Screening by Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

Dental Visits

The Surgeon General has declared that “oral health is integral to general health.... Oral health and general health should not be interpreted as separate entities. Oral health is a critical component of health and must be included in the provision of health care and the design of community programs” (U.S. Department of Health and Human Services, 2000). The lack of access to dental care and resulting oral disease contributes to a range of problems such as compromised ability to bite, chew, and swallow foods; limitations in food selection; and poor nutrition; and missed school for children according to the Surgeon General.

Nationally, dental caries is the most common childhood disease of all. Among 5-17 year olds, having dental caries is more than 5 times as common as asthma and 7 times as common as hay fever. The newly released 2006 California Oral Health Needs Assessment (COHNA) screened approximately 11,000 kindergarten and 10,500 third grade students selected from 186 schools in six regions. The assessment revealed that three out of ten (29%) California third graders had untreated decay. The COHNA also found that 71 percent of third graders had some decay experience (treated and untreated), a rate exceeded only by the State of Arkansas in the 25 states with comparable statewide screenings. Only 28 percent of California’s third graders had received dental sealants, a proven cost-effective preventive measure, giving California one of the lowest rates in the nation (Dental Health Foundation, 2006).

There are persistent disparities in oral health between ethnic groups and income levels. The COHNA found that Latino kindergarteners were 2.4 times more likely to have had untreated decay than white children; low-income kindergarteners receiving free and reduced price lunches were 1.9 times more likely to have untreated decay than higher income children. For third graders, Latino children were 1.7 times more likely to have had untreated decay and students on the school lunch program were 1.7 times more likely to have untreated decay (Dental Health Foundation, 2006).

Only seven out of ten children ages 2 to 11 years (69.8%) had been to the dentist within the past year in Central Coast, the same rate as the state. The rates of recent dental visits ranged from 73.6 percent in Santa Cruz County to 60.0 percent in Monterey/San Benito. (Figure 111). Latino children were less likely to have had a dental visit within the past year, although lower income children were more likely to have seen a dentist. (Figure 112).

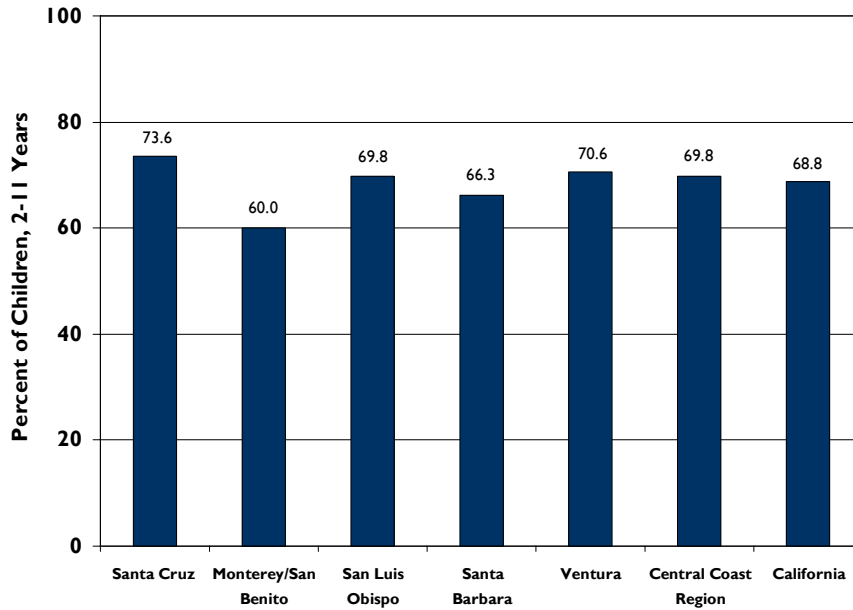


Figure III: Percentage of Children, 2-11 Years, with Dental Visit Less Than One Year Ago, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

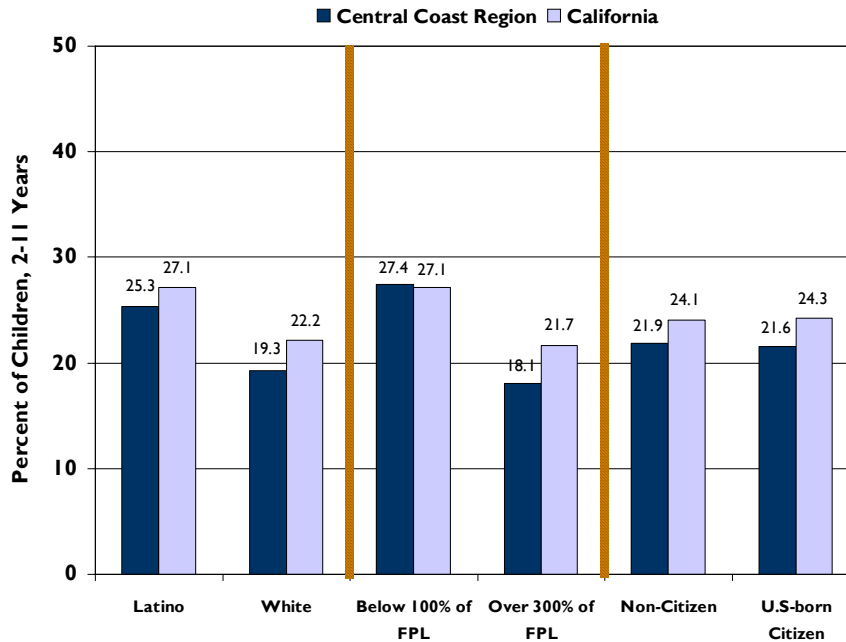


Figure II2: Percentage of Children, 2-11 Years, Never Having a Dental Visit Ethnicity, Poverty Level and Citizenship Status, Central Coast Region, 2001 and 2003 Combined

Source: 2001, 2003 CHIS; UCLA Center for Health Policy Research, 2005

*Data unstable due to small sample size and should be used with caution.

Immunizations

Immunizations can prevent disability and death from infectious diseases for individuals and can help control the spread of infections within communities. California schools are required to verify each child's immunization record to ensure all required shots are completed. Before entering kindergarten, children need a total of five DTaP (diphtheria, tetanus, pertussis), four polio, three hepatitis B, two MMR (measles, mumps, rubella) and one varicella (chickenpox) shot. The federal Centers for Disease Control and Prevention and California Department of Health Services now recommend that all adolescents, including entering seventh graders, get two new shots:

- Pertussis vaccine (Tdap) combined with a tetanus and diphtheria booster will protect adolescents against whooping cough (pertussis) since they lose protection from their childhood doses of DTaP.
- Meningococcal conjugate vaccine is recommended for seventh graders, high school freshmen and college freshmen who will be living in dorms. It protects them from the most common type of bacterial meningitis.

Childhood immunization rates in the Central Coast differ from county to county. In Santa Cruz, 87 percent of kindergarteners were fully immunized in 2004, while in neighboring Monterey County 95.5 percent received all the required immunizations. Statewide, 92.9 percent of kindergarteners had received all of their immunizations. All counties, except Monterey County were below the *Healthy People 2010* national objective of 95 percent.

For seventh graders, Monterey County had the lowest rate of immunizations – only 68.6 percent had been fully immunized in 2003, an increase from 62.5 percent in 2000. All counties were below the state rate of 78.9 percent.

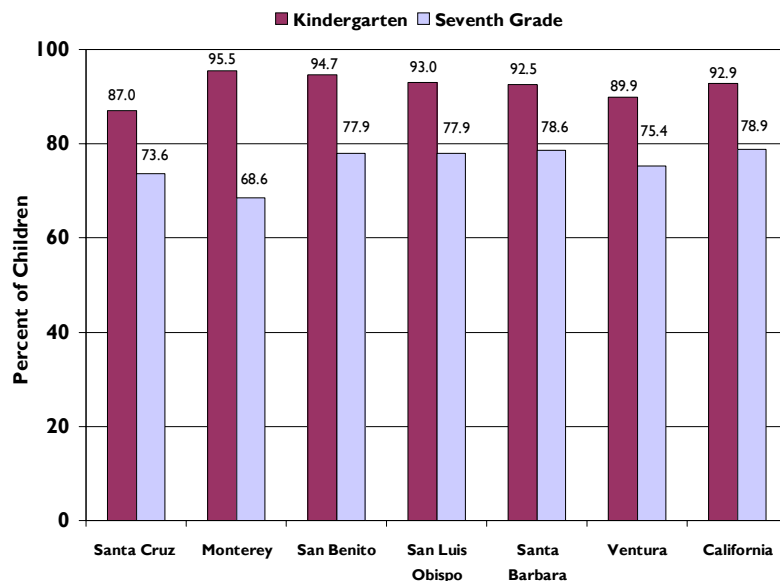


Figure 113: Percentage of Kindergarten Children, 2004, and Seventh Grade Children, 2003, Fully Immunized, Central Coast Region

Source: CA Department of Health Services, 2005e

B. USE OF PUBLIC PREVENTION PROGRAMS

WIC

The Women, Infants, and Children (WIC) Supplemental Nutrition Program is a supplemental food and nutrition program for low-income pregnant, breastfeeding, and postpartum women and children under age five who have a nutritional risk. The goal of the WIC program is to decrease the risk of poor birth outcomes and to improve the health of participants during critical times of growth and development. To meet this goal, WIC provides nutrition education, breastfeeding promotion, medical care referrals, and specific supplemental nutritious foods which are high in protein and/or iron. The specific nutritious foods provided to participants include peanut butter, beans, milk, cheese, eggs, iron-fortified cereal, iron-fortified infant formula and juices (CA Department of Health Services, 2005f).

The WIC program office at the state Department of Health Services estimates the percentage of the eligible population receiving WIC benefits. In most counties, nearly all of the estimated eligible population was being served. However, in San Luis Obispo the state estimates that 35 percent of eligible women and young children are not being served and in Ventura the estimate is 17 percent. Statewide, it is estimated that 18 percent of eligible mothers, infants and children are not being served (CA Department of Health Services, 2005f).

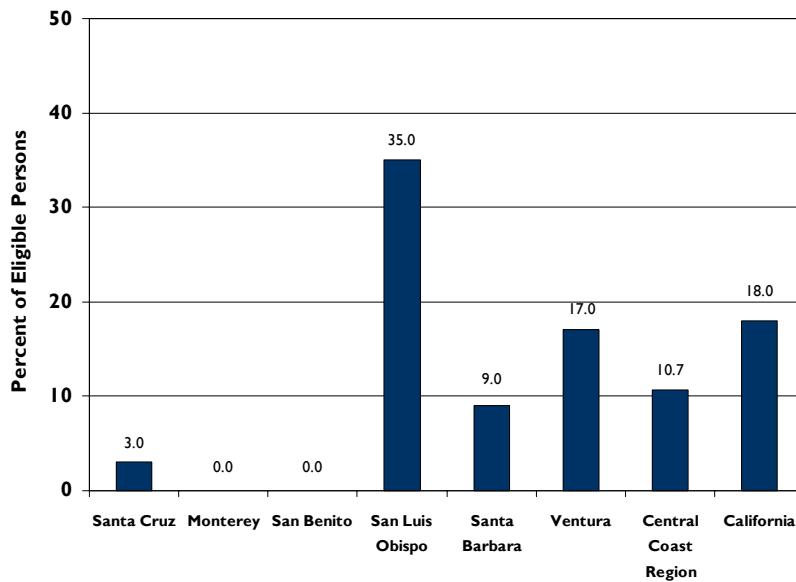


Figure 114: Percentage of Eligible Persons Not Participating in the Women, Infants and Children (WIC) Supplemental Nutrition Program, Central Coast Region, 2003

Source: CA Department of Health Services, 2005f

School Nutrition

All children from families with incomes at or less than 185 percent of the federal poverty level (\$29,766 for a family of three in 2005), regardless of their citizenship status, may receive a free or reduced-price meal from the National School Lunch Program. As compensation for the meals, schools receive a federal cash subsidy and federal farm commodities.

Modeled after the National School Lunch Program, the School Breakfast Program provides a nutritious breakfast to children at affordable prices. The breakfasts must conform to the Dietary Guidelines for Americans and provide one-quarter of the Recommended Dietary Allowances for key nutrients (Food Research and Action Center, 2003).

The National School Lunch Program reached 113,262 children on the Central Coast in 2003-2004. However, many eligible children were not served. Estimated underutilization of the School Lunch program ranges from 24 percent in Ventura County to 33-34 percent in Santa Cruz, San Benito and San Luis Obispo Counties. Moreover, participation in the School Breakfast program is far lower. In San Benito County, it is estimated that 91 percent of eligible children are not served; in San Luis Obispo, 64 percent of eligible children do not participate in the School Breakfast program (California Food Policy Advocates, 2005).

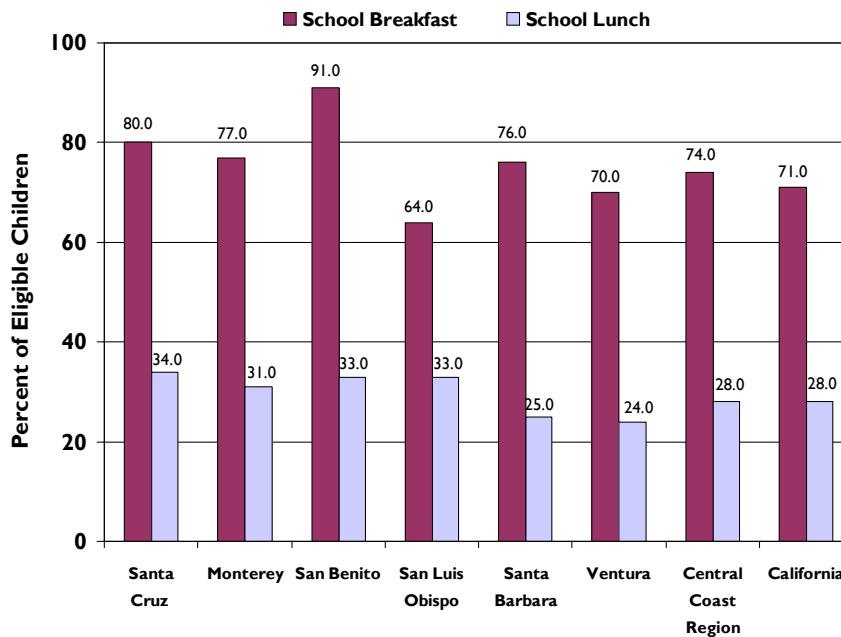


Figure 115: Percentage of Eligible Children Not Participating in the National School Lunch and the School Breakfast Programs, Central Coast Region, 2003-2004

Source: CA Food Policy Advocates, 2005



KEY THEMES AND RECOMMENDATIONS

This report has presented data on the demographics and health of the Central Coast of California. There are many inconsistencies, paradoxes and complexities in the data on this somewhat isolated region. However, several key themes emerge from the report which should factor into the decisions of health officials and policymakers as they grapple with issues of health status and access to care. The Central Coast's unique demographics and health indicators, as presented in this report, will also assist communities as they develop approaches to improving health in their areas. To a degree, the Central Coast is doing slightly better than the rest of the state on a majority of indicators. Yet there are consistent health disparities between the general population and low income residents; Latinos and immigrants. The Central Coast has opportunities to meet these health challenges before changing policies and strategies is more difficult and expensive.

A. KEY THEMES

Changing Demographics

The demographics of the Central Coast are changing rapidly. As in California, the Central Coast population is aging, and the working-age adult population is shrinking. The Central Coast basically has two ethnicities. Nearly half of the population is white (49.8%), and a growing proportion is Latino (39.1%); a higher percentage of Latinos than California as a whole. In some communities, such as South Salinas Valley or Ventura's Santa Clara Valley, seven out of ten residents are Latino. Spanish is increasingly becoming a dominant household language, spoken in more than 60% of homes in the Salinas Valley and southern Santa Cruz County. Overall, one in six adults (16.9%) does not have a high school education.

While the demographics are not health indicators, they are directly related to the health of the region's residents and the demands on the health systems. Recognition of the changing population is critical to designing systems and programs to meet the needs of residents. For instance, ensuring that there is access to culturally appropriate care requires recruiting providers from diverse backgrounds and training providers to be more aware of ethnic differences. Optimally, providers should speak the language of their patients. Otherwise, interpreters should be available and information should be translated not only into the appropriate language, but into appropriate educational levels. Health promotion and disease prevention programs need to be aware of cultural differences and how to encourage clients to take part in screenings and behavior change.

Hidden Populations

This report highlights three distinct, yet overlapping Central Coast high need populations – low wage workers, farmworkers, and children in immigrant families. These residents are often overlooked in the health system and face greater challenges in accessing care.

Major sectors of the Central Coast economy – agriculture and tourism – rely on low wage workers and farmworkers - comprising one in five workers in the region. Although low wage workers have greater health needs and fewer resources, these workers are the least likely to have employer supplied health insurance. They are also less likely to access disease screenings and routine medical care. More attention must be paid to the low wage earners to ensure they can afford to take care of themselves and their families.

Children who are in immigrant families are the future of the Central Coast. Nearly half (45%) of children on the Central Coast live in families in which at least one parent is an immigrant. These children tend to be poorer, have lower health status and have less access to care. These families are also less likely to take advantage of programs designed to help them. Health programs, including Medi-Cal and Healthy Families, need to engage in more effective culturally sensitive outreach to the parents of these children to engender their trust and participation.

Community Disparities

A consistent theme throughout this report is that the Central Coast is not the region that outsiders and tourists necessarily think it is. Impressions gathered from visiting the beach communities or tasting wine at the vineyards are not representative of life in the diverse communities. The wealth of coastal Carmel and Monterey does not translate into the Salinas Valley which is only 20 miles away. The glamour of the tourist areas of Santa Barbara belie the fact that nearly 70 percent of Santa Barbara city elementary students are Latino, and that Santa Barbara County had the state's highest rate of uninsured children in 2001. When funding decisions and program development are based upon perceptions of the region rather than facts, those residents in need remain underserved. Funding formulae developed by the state and federal governments often overlook the intricacies of this rural region, making it difficult to compete for funding with more urban and populous areas.

Disparities among communities also mean that a “one size fits all” approach within a county might not work. A prenatal care outreach program in central Santa Cruz County where 95.6 percent of women receive adequate prenatal care may not be appropriate in the Watsonville area of the county where 15.9 percent of women receive late or no prenatal care. Similarly, within Ventura County, a program to reduce low birthweight babies in the Ojai Valley where only 4.2 percent of babies are of low birthweight might not be the same in the Conejo Valley where 8.3 percent of births are low birthweight.

Health Disparities among Populations

As stark as differences are among individual communities, the disparities between populations on ethnic, immigration and income lines is even more pronounced. Throughout the report, stratified analysis shows that the three “target” groups – poor families, Latinos and immigrants –compare unfavorably to the higher income, white and citizen families. They are more likely to: have poorer

health status, be overweight as adolescents, need help for emotional/mental health, smoke tobacco, not have a usual source of care, not have had a recent dental visit, and not have had screenings for cervical, breast, colorectal and prostate cancer.

On the other hand, these populations were less likely to have been diagnosed with asthma, coronary heart disease, and hypertension. (Further study would be necessary to see if the *prevalence* of these diseases, as opposed to the *diagnosis* of these diseases is also lower, since the lack of diagnosis may be the result of poor access to care.) They were also less likely to have delayed or foregone care, which also might be related to lack of information on when it is appropriate to seek health care. Noting these disparities is important to allow for appropriate focus to be placed on those populations with the greater needs for programs and services to improve their health.

While some of the differences in access and health status in these communities can potentially be explained by demographic differences such as income and educational attainment, there is a large body of research that suggests that the disparate health outcomes are related to how different races and ethnic groups are treated by our health care system. A recent congressionally mandated report from the Institute on Medicine (IOM), *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (Smedley, 2003) found that individuals who are white tended to receive a higher quality of care than did individuals from other racial and ethnic groups, even when insurance status, income, age, and severity of conditions were comparable. Evidence reviewed in that report suggests that bias, prejudice, and stereotyping on the part of health care providers may contribute to differences in care.

Access to Care and Coverage

The increasing costs of care and diminishing health insurance coverage are putting strains on the ability of Central Coast residents to receive care. As noted in the report, a premium for an HMO insurance plan would amount to approximately 17 percent of median family income in Santa Barbara and Ventura counties. With the high concentration of industries that do not provide coverage, one out of six Central Coast residents goes without insurance. Medi-Cal will only cover the poorest residents, thus leaving most uninsured, often low wage, working families without assistance.

The burden of caring for the uninsured patients has shifted to local government and community resources such as hospitals, clinics and other charity care. Insured patients end up paying more as the providers attempt to shift some of the cost of uncompensated care to those who able to pay.

There are a number of approaches to covering the uninsured. The proposals generally fall into four major categories:

- Employer-mandate or “pay or play” proposals
- Single-payer proposals
- Individual mandates, and
- Incremental approaches.

The California Legislature passed a pay or play employer mandate (SB2) in 2004 requiring employers to either offer insurance to employees and dependents or pay into a state fund that would provide such coverage. However, in a voter initiative on SB2 in 2005, the legislation was narrowly defeated. Single-payer proposals in the Legislature would create a single, government-based health insurance entity in the place of existing public and private coverage. It is contemplated that the savings from

reduced administrative costs for insurance companies and processing would provide funding to expand coverage to the uninsured. While these efforts have garnered significant support, they are unlikely to be enacted into law in the near future.

Individual mandates would require all residents to obtain health insurance, similar to requirements to obtain auto insurance. For such a system to be effective, there must be access to affordable health plans with comprehensive coverage, and subsidies for those unable to afford insurance. Also, such plans should not further diminish the major role that employers play in ensuring access to coverage, either by providing it or by paying *livable wages*.

Incremental approaches would expand availability to public health insurance to certain populations. The Legislature passed AB772 in 2005 to provide coverage to all children under 300 percent of the federal poverty level. The legislation was vetoed by the Governor and is now a component of a tobacco tax initiative to be placed on the November 2006 ballot.

At the federal level, the President has been promoting health savings accounts (HSAs) as a solution to the problem of the uninsured. These accounts would allow persons with high deductible health insurance (over \$1050 for individuals) to contribute to an HSA. Contributions to HSAs are tax deductible, earnings on the HSA accounts accumulate tax free, and withdrawals from the accounts are tax free if used for qualified medical expenses. Recent analyses question the ability of these accounts to help the uninsured. One analysis projects that the proposed HSAs would in fact increase the number of uninsured as employers drop coverage and would cost almost \$12 billion per year to the federal budget, if fully phased in (Gruber, 2006).

In a locally driven example of an incremental approach on behalf of uninsured children, there are significant on-going efforts to enroll and retain children who are eligible for existing public programs such as Medi-Cal and Healthy Families, and to provide coverage for ineligible children. Santa Cruz, San Luis Obispo and Santa Barbara Counties have developed county-based programs known as Healthy Kids to provide universal health coverage to children in families with income up to 300 percent of the federal poverty level, including undocumented children. Experience in other counties is that approximately two-thirds of uninsured children who apply for coverage are eligible for the Medi-Cal program or the Healthy Families program, and only one-third of children require the new local program.

Even for those with insurance, accessing care can be daunting. Medi-Cal, which covers one in five Central Coast children, is not accepted by most private physicians and dentists. Providers most often cite the rate of reimbursement and the red tape as the reasons for refusing to take Medi-Cal. Enhancing reimbursements as was done for prenatal care, or through managed care, makes it more likely that providers accept Medi-Cal patients. Also, federally qualified health centers and community clinics have stepped into the void and provide most of the care for Medi-Cal recipients.

Medicare patients – the elderly and disabled – also experience difficulties in finding providers. In certain counties, particularly San Luis Obispo and Santa Cruz Counties, Medicare reimbursement rates are among the lowest in the nation. The rates are based upon the rural description of the counties, without regard to the cost of living and the cost of practicing medicine in the region. Efforts to have the federal government reform this disparity have fallen short.

Chronic Disease Prevention – Nutrition and Exercise

Medical care alone does not result in good health. Diet, exercise and avoiding unhealthy activities, such as smoking and excessive drinking, affect health much more than health care. Genetics and environment also play large roles in determining the health of a person. Furthermore, preventive health screenings and treatment are available for major diseases such as breast and cervical cancer, but they are not always utilized by the target populations. Lack of education, difficulties in accessing services and cost can all act as barriers to use of preventive services.

The epidemic of obesity and resulting chronic diseases will eventually overwhelm the health system. Over half of Central Coast adults are overweight or obese. One-third of Central Coast children are above the normal Body Mass Index and at risk of developing adult obesity. Programs which provide education for healthy eating, environments – including schools and worksites - which ensure access to affordable, quality foods, and communities which are conducive to physical activity can help stem the tide of the epidemic. The Gold Coast Collaborative for Nutrition and Fitness, a regional approach in Ventura, Santa Barbara and San Luis Obispo Counties, and Monterey County independently, have been attempting to raise awareness of childhood obesity issues, galvanize support and highlight effective programs to combat obesity. Communities should review their programs and environments to ensure that opportunities to promote health are available to all.

Oral Health

Oral and dental health care have not been integrated into general health care to the extent that is possible. Dental caries is an epidemic among children with approximately 7 out of 10 third graders having some evidence of decay, and 3 out of 10 third graders having untreated decay (Dental Health Foundation, 2006). Access to dental care for children, particularly from low income families, is limited due to poor provider reimbursement, a general shortage of dentists, and a lack of dentists willing to treat young children. Oral health education and dental disease prevention programs lack sufficient funding to provide the continuous services that are necessary to improve dental health. And, an effective population-based approach – fluoridation of water supplies – has been rejected by several Central Coast communities. Prevention of dental disease, linked with quality nutrition, is far more cost-effective than its treatment, but adequate resources have not been forthcoming.

Data Availability

The absence of reliable community-level health data makes it difficult to fully understand a community's needs. Most data sources do not allow for sub-county analysis, thus masking the nature of health issues in individual communities. Data sets, such as hospital discharge data, that have the potential for small area analysis, are difficult to obtain. More localized data is necessary not only for local officials to develop programs to reach the needier populations, but also for state and federal officials to understand the nature of the region.

B. RECOMMENDATIONS

While specific recommendations and implementation plans for each community are best left in the hands of those communities, the authors provide the following general recommendations:

- Be cognizant of and address the changing demographics of communities and the region.
 - Recruit more bilingual providers to provide services in a patient’s own language and provide appropriate oral interpreters and written translations at an appropriate educational level, when bilingual staff are not available. Train the existing workforce to be more culturally aware;
 - Prepare for the continued increase in the elderly population, not only in the delivery of health care, but also in the delivery of home and community based services.
- Address the barriers to care faced by “hidden populations” – service industry workers, farmworkers and immigrants.
 - Develop systems to improve access to health care for low wage workers including industry-based health coverage, outreach by community clinics, and workplace health promotion and disease prevention education;
 - Encourage immigrants who are eligible for health programs such as Healthy Families, Medi-Cal and CHDP to enroll, stay enrolled and utilize these programs for cost-effective preventive, primary and necessary care.
- Identify needs on a community level and work with individual communities to address them.
 - Gather data on local resources and needs, share the data with the communities, and strategize on how to improve health in the community;
 - Allocate funds and resources based on needs in communities, rather than on current location of services.
- Ensure that all residents have access to quality care.
 - Advocate for programs that expand access to affordable, comprehensive coverage, rather than those that provide minimal benefits, provide tax advantages to higher income residents, and shift healthy subscribers out of the risk pool. Support the movement towards universal coverage for all residents, starting with children;
 - Continue to support the safety net institutions of county health care delivery systems, community clinics, and other nonprofit institutions;
 - Increase provider reimbursement for public programs, particularly for dental services, to encourage private providers to see low-income patients.
- Utilize state and region-wide resources to initiate community efforts to combat the growing epidemic of obesity and overweight children and adults.
 - Develop programs that incorporate healthy eating and physical activity in homes, schools, workplaces and child care/senior centers to reduce the risk of obesity and chronic disease;
 - Engage in community planning that facilitates safe and accessible physical activities and access to fresh, nutritious foods.
- Incorporate oral health as a component of physical health.
 - Implement the fluoridation of water supplies to combat dental disease;
 - Fully fund oral health education and disease prevention programs for children and parents, linked to nutrition education;
 - Improve access to dental care for low income populations by expanding community-based services and increasing provider reimbursement rates for public programs.

- Engage in continuous surveillance of community health through data gathering and dissemination.
 - Develop systems that capture community-level data on health care utilization, health status and environmental risk factors to identify local needs;
 - Regularly publicize findings to encourage community action on health improvement activities.

CONCLUSION

While further research on understanding the extent of and underlying causes of the health conditions in the Central Coast is clearly imperative, this should not deter immediate action to combat disparities already identified. It is important that community stakeholders, community leaders and policy makers work diligently to devise and implement solutions that are affordable, practical, and effective. Failing this, the intense beauty and positive attributes of the region will only be available to those that can afford it while the health of many residents falters. The paradox of bounty and poor access to health care need not continue, and the paradise that is enjoyed by many can be shared by all who live here.

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APPENDIX I: SUMMARY OF HEALTH INDICATORS

Indicator	Santa Cruz County	Monterey County	San Benito County	San Luis Obispo County	Santa Barbara County	Ventura County	Central Coast	California	Coast Latino	Central Coast Low income (<FPL)	Central Coast Non-citizen
Demographics											
Number of residents (2005)	262,312	428,905	58,452	262,634	419,599	817,288	2,249,190	36,854,224			
Population growth (2000 - 2010)	5.8%	11.4%	14.9%	11.1%	9.3%	12.5%	10.8%	13.7%			
Youth (% of pop., age 0-17; 2005)	22.6%	27.3%	30.3%	19.4%	24.0%	26.4%	25.0%	26.1%			
Non-elderly adults (% of population, age 18-64; 2005)	67.3%	62.9%	61.5%	65.4%	63.7%	62.3%	63.6%	62.9%			
Elderly (% of population, age 65 and over; 2005)	10.1%	9.9%	8.3%	15.1%	12.2%	11.3%	11.4%	11.0%			
Latinos (% of population; 2005)	29.4%	51.2%	49.6%	18.4%	37.6%	42.6%	39.1%	35.9%			
Spanish speakers (% of households; 2004)	24.1%	43.9%	35.0% ¹	10.5%	26.2%	27.3%	27.8%	27.6%			
Per capita income (2004)	31,396	22,502	20,932 ¹	25,125	26,496	30,797		25,411			
Children in poverty (% of children; 2004)	15.9%	21.9%	11.4% ¹	7.1%	16.6%	11.3%		18.5%			
Family income below \$35,000 (% of families; 2004)	16.5%	32.3%	24.2% ¹	22.4%	23.2%	19.1%	22.4%	28.6%			
Unemployment (% of workforce; 2004)	7.0%	8.2%	9.5%	4.4%	4.7%	5.3%		6.2%			
No high school diploma (% of adults, age 25 and over; 2004)	15.2%	27.2%	25.1% ¹	8.3%	17.0%	15.2%	16.9%	19.6%			
Health services and providers											
Staffed hospital beds (per 1000 persons; 2004)	1.4	1.4	2.2	1.0	1.5	1.5	1.4	1.9			
Primary care physicians (per 100,000 persons; 2002)	82	61	40	73	79	67		71			

Indicator	Santa Cruz County	Monterey County	San Benito County	San Luis Obispo County	Santa Barbara County	Ventura County	Central Coast	California	Coast Latino	Central Coast Low income (<FPL)	Central Coast Non-citizen
Registered nurses (RNs) (per 100,000 persons; 2005)	921	604	484	984	649	844	778	814			
Dentists (per 100,000 persons; 2002)	64.3	62.1	29.0	61.4	69.4	64.9	63.8	76.0			
Licensed psychologists (per 100,000 persons; 2000)	45	19	5	58	45	30	35	32			
Health insurance and programs											
Uninsured (% of residents, 0-64 years; 2001, 2003)	13.9%	17.1%		14.0%	18.2%	15.1%	15.9%	15.9%	28.0%	29.2%	41.2%
Employer-based coverage (% of residents, 0-64 years; 2001, 2003)	60.6%	59.7%		58.2%	56.7%	62.3%	60.1%	59.4%			
Medi-Cal program enrollment (% of residents, 0-64 years; 2003-2004)	12.8%	14.4%		13.5%	14.7%	10.8%	12.8%	15.4%			
No dental insurance (% of adults, 18 years and over; 2001-2003)	37.0%	38.4%		41.7%	34.6%	35.5%	36.9%	35.2%	41.6%	34.7%	47.6%
Health status											
Perceived health status (% of residents, 0-64 years, reporting fair/poor health; 2001, 2003)	15.1%	19.0%		9.9%	15.0%	13.6%	15.0%	15.0%	26.9%	29.6%	35.3%
Low birthweight (% of live births; 2001-2003)	5.2%	5.8%	4.7%	5.5%	6.4%	6.1%	5.6%	6.4%			
Infant mortality (no. of infant deaths per 1000 live births; 2001-2003)	4.2*	5.8	4.3*	4.4*	4.8	5.2	4.8	5.5			
Late or no prenatal care (% of births; 2001-2003)	8.9%	16.2%	19.6%	17.6%	19.2%	9.5%	15.2%	13.6%			
Teen births (per 1000 women age 15-19; 2001-2003)	32.2	58.8	40.4	21.3	40.2	36.6	38.3	41.1			
Chlamydia (cases per 100,000 persons; 2001-2003)	216.5	288.2	181.1	166.9	235.4	179.6		310.3			

Indicator	Santa Cruz County	Monterey County	San Benito County	San Luis Obispo County	Santa Barbara County	Ventura County	Central Coast	California	Coast Latino	Central Coast Low income (<FPL)	Central Coast Non-citizen
AIDS (cases per 100,000 persons; 2001-2003)	7.3*	7.5	5.4*	8.2*	6.3	5.0		14.7			
Asthma diagnoses (% of adults; 2001, 2003)	14.3%	11.0%		14.5%	11.2%	12.1%	12.3%	11.8%	7.5%	9.0%	4.0%
Suffer from hunger (% of adults < 200% FPL; 2001)	16.3%	12.7%	4.7**	13.7%	5.1**		10.3%				
Adult obesity (% of adults overweight or obese; 2001, 2003)	51.2%	59.8%		54.9%	51.5%	52.4%	53.9%	55.2%	64.2%	50.8%	57.8%
Children at risk of obesity (% of 7th graders above normal BMI; 2004-05)	32.3%	36.5%	29.6%	27.2%	31.3%	30.7%	31.7%	33.3%			
Hypertension diagnoses (% of adults, 45 yrs. and over; 2001, 2003)	19.7%	21.9%		24.9%	20.9%	22.1%	21.9%	22.8%	16.4%	15.5%	11.5%
Mental health services need (% of adults reporting need; 2001)	16.9%	13.1%		16.1%	16.9%	16.5%	15.9%	15.1%	16.5%	19.8%	17.9%
Suicide (deaths per 100,000 population; 2001-2003)	13.0	9.3	9.5*	13.4	10.2	9.2		9.5			
Health behaviors											
Alcohol use (% of adults reporting drinking in prior month; 2001, 2003)	69.8%	56.1%		67.6%	62.1%	62.0%	62.4%	57.6%			
Binge drinking (% of adults reporting drinking more than 5 drinks at single time in past month; 2001, 2003)	19.6%	14.1%		19.0%	18.5%	16.8%	17.2%	15.3			
Tobacco use (% of adults who are current smokers; 2003)	13.8%	16.5%		16.0%	14.3%	13.4%	14.6%	16.5%			
Motor vehicle deaths (deaths per 100,000 persons; 2001-2003)	11.0	14.0	21.4*	12.5	9.5	10.3	n/a	12.0			
No usual source of care (% of adults; 2001, 2003)	12.6%	16.8%		13.7%	13.5%	13.8%	14.2%	14.0%	24.2%	24.7%	30.8%
Delayed or foregone care (% of adults; 2001, 2003)	21.5%	15.0%		16.7%	12.7%	13.4%	14.9%	14.0%			

Indicator	Santa Cruz County	Monterey County	San Benito County	San Luis Obispo County	Santa Barbara County	Ventura County	Central Coast	California	Coast Latino	Central Coast Low income (<FPL)	Central Coast Non-citizen
Cervical cancer screening (% of women, 18 years and over, never had pap test; 2001,2003)	5.5%	10.9%		4.4%	5.6%	7.7%	7.3%	7.2%	15.0%	17.3%	13.8%
Breast cancer screening (% of women, 30 years and over, never had a mammogram; 2001, 2003)	32.4%	31.0%		16.3%	26.6%	258.8%	26.6%	26.9%	43.3%	36.4%	48.1%
Colorectal cancer screening (% of persons, 40 years and over, never had screening; 2001, 2003)	47.2%	51.1%		39.0%	42.1%	49.7%	46.9%	46.1%	73.0%	69.4%	82.3%
Prostate cancer screening (% of men, 40 years and over, never had screening; 2001, 2003)	56.3%	54.6%		50.8%	52.4%	55.4%	54.3%	58.2%	82.1%	81.1%	86.7%
Immunizations (% of kindergarteners fully immunized; 2004)	87.0%	95.5%	94.7%	93.0%	92.5%	89.9%		92.9%			
<p>¹ Data is unreliable due to small sample size / low rate of occurrence. * For San Benito County, 2004 ACS data and not available, thus Census 2000 data provided. Monterey and San Benito Counties are combined in reports from the California Health Interview Survey</p>											

APPENDIX II: SELECTED DEMOGRAPHIC AND BIRTH OUTCOME DATA BY COMMUNITY CLUSTERS

Cluster No.	County	Cluster Name	Percent Latino Residents	Percent Households Don't Speak English	Percent Families in Poverty	Percent Immigrants	Percent Female Headed Households with Children
1	Santa Cruz	South Santa Cruz County	64.4	60.2	12.1	37.7	7.9
2	Santa Cruz	Central Santa Cruz County	8.8	12.2	2.7	9.0	5.3
3	Santa Cruz	North Santa Cruz County	6.4	8.9	4.5	5.6	5.3
4	Santa Cruz	Santa Cruz Urban	17.2	20.7	6.6	14.0	6.1
5	San Benito	San Benito County	47.1	37.3	6.7	18.7	6.2
6	Monterey	South Salinas Valley	64.6	59.3	15.3	35.4	6.8
7	Monterey	Monterey Peninsula/Big Sur	7.5	18.4	3.3	14.3	4.0
8	Monterey	North Salinas Valley	72.4	66.9	12.8	37.6	7.9
9	Monterey	North Monterey County	64.5	60.3	12.8	35.2	6.6
10	Monterey	Salinas Urban	31.6	37.3	8.4	24.0	9.6
11	San Luis Obispo	SLO Urban	14.3	13.3	6.6	7.7	3.9
12	San Luis Obispo	South SLO County	20.6	18.2	6.5	10.6	5.7
13	San Luis Obispo	North Coastal SLO County	11.0	12.2	5.4	8.9	4.7
14	San Luis Obispo	North Central SLO County	10.2	7.7	6.0	4.7	7.0
15	San Luis Obispo	North SLO County	22.5	20.2	9.5	12.2	6.5
16	Santa Barbara	Santa Maria Valley	49.0	42.2	11.9	25.7	7.1
17	Santa Barbara	Lompoc Valley	30.2	26.2	10.0	14.8	8.0
18	Santa Barbara	Santa Ynez Valley	19.7	20.8	5.3	14.8	4.4
19	Santa Barbara	Goleta Valley	23.4	29.8	7.6	18.8	4.1
20	Santa Barbara	Montecito /Summerland /Carpinteria	24.5	23.9	4.5	17.5	4.3
21	Santa Barbara	Santa Barbara Urban	31.1	32.3	6.3	22.9	4.8
22	Ventura	Ventura Urban	25.0	21.7	6.4	13.1	6.8
23	Ventura	Ojai Valley	15.8	14.7	5.8	10.4	6.2
24	Ventura	Santa Clara Valley	67.5	54.5	12.0	27.9	6.9
25	Ventura	Greater Oxnard Plains	62.6	58.4	11.1	34.1	8.0
26	Ventura	East Ventura County	18.0	23.4	3.8	16.8	5.9
27	Ventura	Santa Rosa Valley	15.8	19.8	3.5	12.9	4.3
28	Ventura	Conejo Valley	11.6	18.7	3.2	15.1	4.9

Cluster No.	County	Cluster Name	Percent Population, 25 Years or More, without High School Diploma	Percent Births to Women, 15-19 Year	Percent Births with Low Birthweight (<2500 gm)	Percent Births with Late or No Prenatal Care
1	Santa Cruz	South Santa Cruz County	42.5	13.6	4.3	15.9
2	Santa Cruz	Central Santa Cruz County	6.6	2.3	4.4	4.4
3	Santa Cruz	North Santa Cruz County	6.3	3.8	5.1	8.4
4	Santa Cruz	Santa Cruz Urban	11.2	5.5	6.6	7.3
5	San Benito	San Benito County	24.5	8.7	5.0	19.7
6	Monterey	South Salinas Valley	45.8	17.2	5.9	17.0
7	Monterey	Monterey Peninsula/Big Sur	6.7	3.8	5.4	10.1
8	Monterey	North Salinas Valley	48.1	14.4	7.9	17.5
9	Monterey	North Monterey County	44.6	13.0	5.8	15.8
10	Monterey	Salinas Urban	25.3	10.7	4.9	14.1
11	San Luis Obispo	SLO Urban	16.7	5.2	5.2	13.4
12	San Luis Obispo	South SLO County	16.0	10.3	4.9	16.3
13	San Luis Obispo	North Coastal SLO County	9.0	6.0	4.9	11.5
14	San Luis Obispo	North Central SLO County	10.8	11.1	6.2	17.5
15	San Luis Obispo	North SLO County	18.5	10.0	5.6	19.0
16	Santa Barbara	Santa Maria Valley	31.5	13.9	6.2	21.7
17	Santa Barbara	Lompoc Valley	20.1	10.1	7.1	18.0
18	Santa Barbara	Santa Ynez Valley	13.6	6.4	5.6	14.1
19	Santa Barbara	Goleta Valley	16.0	7.9	5.7	11.0
20	Santa Barbara	Montecito /Summerland /Carpinteria	13.4	4.9	7.0	8.0
21	Santa Barbara	Santa Barbara Urban	16.3	7.0	8.0	11.8
22	Ventura	Ventura Urban	14.9	6.2	6.1	7.6
23	Ventura	Ojai Valley	13.3	7.3	4.2	8.8
24	Ventura	Santa Clara Valley	39.1	12.5	5.5	12.2
25	Ventura	Greater Oxnard Plains	38.1	13.1	5.8	14.3
26	Ventura	East Ventura County	12.9	5.2	6.8	5.3
27	Ventura	Santa Rosa Valley	9.3	4.1	6.2	6.3
28	Ventura	Conejo Valley	7.8	3.0	8.3	4.5

Source: U.S. Census Bureau, Census 2000, 2005 and CA Department of Health Services, 2005a

APPENDIX III: LICENSED FREE AND COMMUNITY CLINICS, OSHPD, 2004

No.	Facility Name	City	Type of Clinic
Santa Cruz County			
1	Santa Cruz Women's Health Center	Santa Cruz	Community
2	Doran Resource Center For Blind And Visually Impaired	Santa Cruz	Community
3	Planned Parenthood - Westside	Santa Cruz	Community
4	Planned Parenthood - Watsonville	Watsonville	Community
5	Dientes Community Dental Clinic, Inc	Santa Cruz	Community
6	Pregnancy Resource Center	Santa Cruz	Community
Monterey County			
1	Planned Parenthood - Seaside	Seaside	Community
2	Clinica De Salud Del Valle De Salinas	Salinas	Community
3	Planned Parenthood - Salinas	Salinas	Community
4	Big Sur Health Center	Big Sur	Community
5	Blind And Visually Impaired Center ff Monterey Co	Pacific Grove	Community
6	Clinica Popular-King City	King City	Community
2	Clinica De Salud Del Valle De Salinas-Soledad	Soledad	Community
3	Clinica De Salud Del Valle De Salinas - Greenfield	Greenfield	Community
4	Clinica De Salud Del Valle De Salinas-Sanborn	Salinas	Community
5	Planned Parenthood - Greenfield	Greenfield	Community
6	Clinica De Salud Del Valle De Salinas - Castrovill	Castroville	Community
7	Compassion Pregnancy Ctr And Clinic of Monterey Bay	Monterey	Community
8	Mobile Dental Clinic	Salinas	Community
9	Clinica De Salud Del Valle De Salinas-Broadway	King City	Community
San Benito County			
1	San Benito Health Foundation	Hollister	Community
San Luis Obispo County			
1	Central Rehabilitation Clinic	San Luis Obispo	Community
2	EOC Health Services-San Luis Obispo Site	San Luis Obispo	Community
3	EOC Health Services-Arroyo Grande Site	Arroyo Grande	Community
4	Nipomo Community Medical Center	Nipomo	Community
5	Planned Parenthood Of San Luis Obispo County	San Luis Obispo	Community
6	Coastal Medical Center	Arroyo Grande	Community
2	Doctors Office/Fair Oaks; Community Health Ctrs	Arroyo Grande	Community
3	Community Health Centers, Paso Robles	Paso Robles	Community
4	Los Robles Community Medical Center At Templeton	Templeton	Community
5	Community Health Centers At Templeton	Templeton	Community
6	Community Health Centers, San Luis Obispo	San Luis Obispo	Community
7	Community Health Centers, Women's Health	San Luis Obispo	Community
8	Community Health Centers, Morro Bay	Morro Bay	Community

9	Community Health Centers, Atascadero	Atascadero	Community
Santa Barbara County			
1	Devereux Foundation Community Clinic	Goleta	Community
2	Isla Vista Neighborhood Clinic	Isla Vista	Community
3	Marian Community Clinics - Guadalupe	Guadalupe	Community
4	Westside Neighborhood Clinic	Santa Barbara	Community
5	Planned Parenthood of Santa Barbara County, Inc.	Santa Barbara	Community
6	Eastside Neighborhood Clinic	Santa Barbara	Community
2	Planned Parenthood of Santa Maria	Santa Maria	Community
3	Community Health Centers, Santa Maria	Santa Maria	Community
4	Cancer Center of Santa Barbara	Santa Barbara	Community
5	Marian Community Clinics-Santa Maria	Santa Maria	Community
6	American Indian Health And Services	Santa Barbara	Community
7	Community Health Centers, Santa Maria High School	Santa Maria	Community
8	Community Health Centers, Guadalupe	Guadalupe	Community
Ventura County			
1	Free Clinic Of Simi Valley	Simi Valley	Free
2	Conejo Free Clinic	Thousand Oaks	Community
3	Clinicas Del Camino Real, Inc., Oxnard	Oxnard	Community
4	Clinicas Del Camino Real, Inc. Ventura	Ventura	Community
5	Clinicas Del Camino Real, Inc. , Fillmore	Fillmore	Community
6	Planned Parenthood	Ventura	Community
7	Ojai Valley Community Health Center	Ojai	Community
8	Life Choices Pregnancy Clinic Of Ojai Valley	Ojai	Community
9	Casa Pacifica Medical Clinic	Camarillo	Community
10	Clinicas Del Camino Real, Inc., Maravilla	Oxnard	Community
11	Clinicas Del Camino Real, Inc., Santa Paula	Santa Paula	Community
12	Conejo Valley Women's Resource Center	Thousand Oaks	Community
13	Clinicas Del Camino Real, Inc., Oceanview	Oxnard	Community

Source: CA OSHPD; Facility Utilization Reports 2000 and 2004; 2005