

HEALTHY PEOPLE 2010

A 2010 Profile of Health Status in the San Joaquin Valley



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Additional information about the Central Valley Health Policy Institute, its program and activities (including this report), can be found at: www.cvhpi.org

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INTRODUCTION

In 1979, Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention provided national goals of reducing premature deaths and preserving independence for older adults. In 1980, another report, Promoting Health/Preventing Diseases: Objectives for the Nation, set forth 226 targeted health objectives designed as goals to improve the health status of residents in the United States over the following 10 years. In 1990, the U.S. Department of Health and Human Services released Healthy People 2000. This document set 22 priority areas for health in the United States. Under each of these priorities were specific health objectives to be met by the year 2000. Healthy People 2000 provided the foundation for Healthy People 2010 (HP 2010), which builds on initiatives pursued over the past two and one-half decades.

Healthy People 2010 (U.S. Department of Health and Human Services, 2000) is a national initiative designed as a guide of priorities regarding health and health care. The two major goals of HP 2010 are: 1) to increase life expectancy and quality of life and 2) to eliminate health disparities among segments of the population including differences that occur by gender, race or sexual orientation. These goals are delineated in 28 focus areas and specified in 467 measurable objectives.

The 28 focus areas of HP 2010 were developed by lead federal agencies with the most relevant scientific expertise, with input from the Healthy People Consortium – an alliance of more than 400 national membership organizations and 250 state health, mental health, substance abuse, and environmental agencies. In addition to the HP 2010 objectives, 10 leading health indicators were identified. These 10 health indicators reflect the major public health concerns in the United States and were chosen based on their ability to motivate action, the availability of data to measure their progress, and their relevance as broad public health issues. The 22 HP 2010 objectives, specific to these 10 leading health indicators, are being used to track the progress of the health of the nation over the first 10 years of the new millennium (U.S. Department of Health and Human Services, 2000).



HEALTHY PEOPLE 2010 AND THE SAN JOAQUIN VALLEY

Healthy People 2010, the nation's health objectives for the year 2010, is focused on two overarching goals: (1) Increase Quality and Years of Healthy Life and (2) Eliminate Health Disparities. These goals illuminate the vision of a healthy nation. These goals provide the leadership and motivation for a systematic approach to health improvement.

1. INCREASE QUALITY AND YEARS OF HEALTHY LIFE

Quality of life reflects a general sense of happiness and satisfaction. It encompasses all aspects of life, including health, recreation, culture, rights, values, beliefs, aspirations, and the conditions that support a life containing these elements. Over the years, it has become clear that individual health is closely linked to community health—the health of the community and environment in which individuals live, work, and play. Therefore, community health is affected by the collective behaviors, attitudes, and the beliefs of everyone who lives in the community.

2. ELIMINATING HEALTH DISPARITIES:

Health status is a dynamic that often manifests in the relationships between health and income, education, race and ethnicity, cultural influences, environment, and access to quality medical services. Disparities in health status do not fit nicely into any one of these, rather many health problems cross multiple characteristics and are a result of a complex interaction among the different factors. The greatest challenge in understanding health disparities is having access to data that discloses relevant information about race and ethnicity, education and income, disability, and geographic locations. While more data is needed, there is enough data showing a strong relationship between poverty and poor health. The poor, regardless of race or ethnicity, share a disproportionate burden of poor health. The following discussion highlights how health disparities occur among different demographic groups in the San Joaquin Valley (SJV).

Race and Ethnicity

Current knowledge about biological and genetic characteristics of different populations does not explain the health disparities experienced by people of color and immigrant groups compared with the White population. Many health practitioners believe that race is not a major factor, but racism is, as expressed through the unequal socio-economic environment, more exposure to toxic substances and products, limited access to health care, cultural barriers, limited educational and employment opportunities, specific health behaviors, and perceived discrimination (Kreiger, 2003).

Geographic Location

While almost two-thirds of the population in the SJV live in urban areas, most of the counties are designated rural. The valley's current prosperity is not widely shared. There are significant disparities between fast-growing metropolitan areas and slow or no-growth rural counties. Rural counties generally have a higher rate of poverty, with the rural population having less formal education. Rural counties, with lower wages, often lose their young people to urban counties; this leaves an aging population. Access to health care in rural areas is a significant problem. Several areas of the eight counties qualify as nationally recognized health professional shortage areas; this includes primary, dental, vision, and specialist. Across the SJV region there are more than 220 disadvantaged, unincorporated communities, with an estimated population of almost half a million. The unincorporated settlements have a host of conditions

that present threats to health and safety, maintaining economic and educational inequity, and preventing the flourish of more complete communities. There are deficiencies in all kinds of physical infrastructure, and these are joined by substantial deficits in decent affordable housing and human services, health care, and education.

Education and Income

Income and education are both measures of socioeconomic status. Inequality in income and education underlie many health disparities. Research indicates that population groups that suffer the worst health status are also those that have the highest poverty rates and least education. Income data provides an assessment of the resources available to individuals or families to acquire food, housing, clothing, and health care. In the SJV, the youngest and the oldest are generally the poorest. Counties in the southern SJV have the highest child poverty with Fresno at 27.7% and Tulare at 33.4%. Moreover, in the SJV 23.4% adults 5.3% children lack health insurance.

Air Pollution

The latest study (2010) released by the American Lung Association shows Stanislaus County still has great strides to make in its quest for clean air. The SJV is counted among the California regions with failing air quality grades that are subject to persistent and pervasive ozone smog and harmful particle pollution. The SJV generally scores dismally when it comes to air quality in part because of its topography. The mountain ranges that border the valley trap pollution in the air basin. The report's ranking of the 25 cities most polluted by short-term particle pollutions included seven SJV cities in the top 15, with Modesto at the ninth spot and Merced at the 11th (American Lung Association in California, 2010).

Infrastructure

As the San Joaquin counties rapidly grow in population, infrastructural changes have to occur for the valley to adapt to these changes. Improvements include curbs, sidewalks, pavement, parks, adequate drainage and street lighting. These are all deemed necessary to maintain the public health, safety and welfare standards for communities.

Access to Healthy Food and Active Living

The SJV faces alarming rates of obesity among all age groups, leading to equally alarming rates of childhood and adult diabetes, heart disease, high blood pressure and other obesity-related illnesses. Our findings show that in 2007 the percentage of adolescents, age 12-17, who reported being overweight or obese was 17.2%. Of the nonelderly adults, ages, 18-64, 64.2% reported being overweight or obese, and 67.3% of seniors, age 65 and over, reported being overweight or obese, an increasing trend. Valley residents across all age groups did not meet HP 2010 objectives; particularly valley adults were four times higher than the HP 2010 goal. In addition there is an alarming increasing trend in people reporting being overweight or obese for all ages. According to the U.S. Surgeon General's office, obesity is now the fastest growing cause of illness and death in America today.

Why It is Important to Eliminate Health Disparities

Failure to focus on health disparities and the determinants of health places serious limitations on the effectiveness of preventive health care and health promotion programs. Inadequate education and income are serious obstacles to learning about healthy lifestyles, accessing health care, and providing for the basic

food, clothing, and shelter. The health disparities between the 'haves' and the 'have nots' are evidential to longevity, birth outcomes, and health behaviors (diet, physical activity, etc.). The SJV can avoid having two tiers of health outcomes by understanding health disparities and addressing health disparities through effective policies and targeted programs.

In 2003, researchers at the Central California Center for Health and Human Services (CCCHHS) at California State University, Fresno began exploring the health status of the residents of the eight SJV counties of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare using the 10 leading health indicators found in Healthy People 2010. In 2003 they produced Healthy People 2010: 2003 Profile of Health Status in the Central San Joaquin Valley (2003 Profile; Perez & Curtis, 2003). The 2003 Profile provided baseline data on the health status of residents in the valley and identified areas where improvement was needed.

In 2005, Researchers at the Central Valley Health Policy Institute (CVHPI) produced Healthy People 2010: A 2005 Profile of Health Status in the San Joaquin Valley (2005 Profile), to provide an update on the health status of the residents of those same SJV counties.

In 2008, an update on the health status of the residents in the SJV for 2007 was produced to measure the progress towards HP2010 objectives. HP2010: A 2007 Profile of Health Status in the San Joaquin Valley (2007 Profile) was developed with review from the Central California Public Health Partnership of the SJV counties to clarify and confirm individual county data. The report has been disseminated and posted on our website.

In this publication, the 2009 Profile, as its predecessors, we examined the following 10 leading health indicators and 22 selected objectives that are used to measure the progress toward achieving HP2010 overall goals. Although new Healthy People goals will soon become the basis for assessing overall health system performance in the region, state and nation, at least one additional HP2010 will be developed as 2009-2010 data become available. In this report we continue the focus on the 10 leading health indicators listed below.

1. Physical Activity

- a. Increase to 30% the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
- b. Increase to 85% the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness three or more days per week for 20 or more minutes per occasion.

2. Overweight and Obesity

- a. Reduce the proportion of adults who are obese to 15% of the population.
- b. Reduce the proportion of children and adolescents who are overweight or obese to 5% of the population.

3. Tobacco Use

- a. Reduce cigarette smoking by adults to 12% of the population.
- b. Reduce cigarette smoking by adolescents to 16% of the population.

- 4. Substance Abuse
 - a. Increase to 89% the proportion of adolescents that are not using alcohol or any illicit drugs during the past 30 days.
 - b. Reduce the proportion of adults using any illicit drug in the past 30 days to 2% of the population.
 - c. Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month to 6% of the population.
- 5. Responsible Sexual Behavior
 - a. Increase to 50% the proportion of sexually active persons who use condoms.
 - b. Increase to 95% the proportion of adolescents who abstain from sexual intercourse or use condoms, if currently sexually active.
- 6. Mental Health
 - a. Increase to 50% the proportion of adults with recognized depression who receive treatment.

7. Injury and Violence

- a. Reduce deaths caused by motor vehicle crashes to 9.2 per 100,000 persons.
- b. Reduce homicides to 3.0 per 100,000 persons.

8. Environmental Quality

- a. Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency's health based standards for ozone to 0%.
- b. Reduce the proportion of nonsmokers exposed to environmental tobacco smoke to 45% of the population.

9. Immunization

- a. Increase to 80% the proportion of young children who receive all vaccinations that have been recommended for universal administration for at least five years.
- b. Increase to 80% the proportion of adolescents ages 13 to 15 years who receive the recommended vaccinations.
- c. Increase to 90% the proportion of non-institutionalized adults who are vaccinated annually against influenza and those ever vaccinated against pneumococcal disease.

10. Access to Care

- a. Increase to 100% the proportion of persons with health insurance.
- b. Increase to 96% the proportion of persons who have a specific source of ongoing care.
- c. Increase to 90% the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy.

METHODOLOGY

This report reviews the most current available national, state and regional data available as of June, 2009. All data for the 10 leading health indicators was obtained from existing published or web-based sources. Data was compiled for eight counties of the SJV, California, and the nation as a whole, to assess progress relative to each of the objectives. This report was reviewed by each member of the Central California Public Health Partnership.

Data was used to assess the health status of the residents of the eight SJV counties, Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare, in comparison to each other, California and the nation. When possible and appropriate, data was used to show the span between 2001 and 2009, providing an opportunity to assess any progress that had been made in meeting the HP 2010 objectives since the 2007 Profile (Bengiamin, et al., 2008). This data, retrieved from web-based and public-use data sets, have also been compiled into tables and figures. Visual representations of the data allow for comparison between the eight counties and California, the nation, and the HP 2010 objectives.



As secondary data was used in this review, it was not possible to conduct statistical tests for similarities or differences between the SJV HP 2010

objectives, California, the nation, or prior years on each available measure. Where possible, we drew on each source to identify the 95% confidence intervals or other indicators of central tendency and variance for each measure. In this text, we only describe the observed measure for the valley as 'better' or 'worse' than the HP 2010 objective, California, the nation or prior years, if the difference exceeded the confidence interval for the measure. If the available data source did not provide sufficient information to compute confidence intervals, the difference between the observed measure for the SJV and the comparison measure needed to differ by 10% or more to be described as 'better' or 'worse'.

Data Sources

For national data, we relied on sources such as the U.S. Department of Health and Human Services, U.S. Census Bureau, National Center for Health Statistics, National Adolescents Health Information Center, and the Centers for Disease Control and Prevention.

For data on health status in California and the SJV, we relied on sources such as the 2001, 2003, 2005, 2007, and 2009 California Health Interview Survey (UCLA Center for Health Policy Research, 2003; 2005; 2007; 2009), RAND California, California Environmental Protection Agency, California Department of Finance, the American Lung Association, the Kaiser Commission on Medicaid and the Uninsured, and several branches within the California Department of Health Services, i.e. Immunization Branch, STD Control Branch, Maternal and Child Health Epidemiology Section, Birth and Death Statistical Master Files, and the County and Statewide Archive of Tobacco Statistics.

Due to the lack of representative and stable data for the SJV counties, data from this report should be viewed with caution. The authors made every effort possible to report on the health status of the valley residents taking into consideration the data availability and the fact that there is no specific valley database to rely on for regional consistency among the counties.



Data Limitations

This report used data from multiple existing data sources. Findings from these sources are not always available in comparable formats and the quality of these data may be difficult to assess. In general, statistics given in this report should be seen as a guide only and treated with appropriate caution. Further, this report identifies a number of important gaps in accessible data on health measures for the SJV. Although we have sought the most relevant and timely data to assess the region's status on the HP 2010 indicators, there are notable instances where specific, timely and comparable data were unavailable to monitor health status and access to needed services.

As there was a heavy reliance on California Health Interview Survey (CHIS) and other survey-based sources data from the 2001, 2003, 2005, 2007, and 2009, it is important to understand that these data are estimates derived from a sample and are subject to both sampling and non-sampling errors. Sampling error occurs from the selection of people and housing units included in the survey. Non-sampling error occurs as a result of errors that may take place during

the data collection and processing stage. The 2001, 2003, 2005, 2007, and 2009 CHIS are random telephone surveys and are subject to some error, such as refusal rate differences. Households without a telephone were sampled, which could give rise to bias in the estimates. In addition to the high frequent use of mobile phones over landline telephones, the sample may not be representative of the sub-groups in the valley for other reasons. To mitigate the effects of sampling bias, CHIS researchers used special weighting procedures.

Additionally, it is important to note that the use of 2001, 2003, 2005, 2007, and 2009 CHIS data was limited to publicly available files. The authors determined that accessing additional confidential data files, available through the Data Access Center (DAC) established at the UCLA Center for Health Policy Research, presented numerous problems, including data instability due to small sample size.



Source: Great Valley Center. (2008) Mapping the future of the valley: Great Valley Center annual report 2007-2008.

DEMOGRAPHIC CHARACTERISTICS OF THE SAN JOAQUIN VALLEY

Population Change

The SJV, which incorporates 27,493 square miles in the Central California (Map 1), had one of the fastest growing populations in the state between 2000 and 2006. According to the U.S. Census Bureau, the SJV gained a half million new residents during the seven years between 2000 and 2007. By 2007, its population reached more than 3.8 million, about the same as the population in Oregon and more than the population in 25 of the 50 states. It is projected that by 2040 the valley will be home to almost 7 million people. California's population is growing at a faster rate than our country on the whole, and the Central Valley is growing almost 50% faster than the state (Great Valley Center, 2008). Compared to other counties in the region, Kern County has the largest population percentage change (26.9%). The populations in San Joaquin and Merced counties are expected to increase by two and one-half times the current population and are expected to experience the largest population increases among the valley counties over the next 50 years. Other valley counties (Kern, Madera, Merced and San Joaquin) are expected to double their populations by 2040 (RAND California, 2009). Table 1 shows that the SJV had twice the rate population change (20.3%) as did the state (10.0%) and the nation (79.7%).

Place	2000	2010	% Change	County Rank for Population Growth	
Fresno	798,821	930,450	16.4	18.0	
Kern	661,645	839,631	26.9	4.0	
Kings	129,461	152,982	18.2	12.0	
Madera	123,109	150,865	22.5	6.0	
Merced	210,554	255,793	21.5	9.0	
San Joaquin	563,598	685,306	21.6	5.0	
Stanislaus	446,997	514,453	15.1	14.0	
Tulare	368,021	442,179	20.2	13.0	
San Joaquin Valley	3,302,792	3,971,659	20.3		
California	33,871,648	37,871,648	10.0		
Nation	281,421,906	308,745,538	9.7		

Table II. Topulation onlangee in the out oouquin valley, 2000 to 2000

Source: Rand California (2009), Physicians and Surgeons in California.

Age

Table 2 depicts the demographics of the SJV counties, region, and California. The SJV counties have a younger population (age 0-17) than California, with Fresno and Madera counties having the largest percentage of children and adolescents. In 2007, the valley also had higher percentages of residents who were under 20 years of age (34.7%) than did California as a whole (28.7%) (RAND California, 2007a). The presence of a higher proportion of persons under age 20 has implications for family economic wellbeing and the financing of public services.

The percentage of the population age 65 and older varied by county in 2007, but was below the state average of 11.0% in all of the eight valley counties. Kings County had the lowest percentage of residents age 65 and older in the state at 7.7% (Rand California, 2007a). This is slightly higher than the 7.3% reported in 2003. The highest proportion of residents age 65 and older was in Stanislaus County at 10.5%.

Ethnic Background

Hispanic/Latino residents are the largest racial/ethnic group in the SJV in 2009. They represent about 47.2% of the entire population in the valley. Following Hispanic/Latino residents are White, non-Hispanic residents, comprising about 39.2% of all residents in the region. The valley has a lower proportion of non-Hispanic Whites than California as a whole, 42.3%. The next largest ethnicity group is Asian, estimated at 5.9%, less than the state at 12.5%. African Americans follow with a 5.1%, American Indian 2.0%, multi-racial population 2.4% and Pacific Islander at 0.3% (U.S. Census Bureau, American Community Survey, 2009).

In 2009, all eight SJV counties had a higher percentage of Latino residents than the state as a whole (36.6%). Tulare County had the highest percentage of Latino residents in the valley at 57.5%, followed by Merced County at 52.9%. San Joaquin County had the lowest percentage of Latino residents compared to the state, at 37.0% (Table 2; U.S. Census Bureau, American Community Survey, 2009).

Seven of the eight counties had a percentage of White, non-Hispanic population less than the state percentage at 42.3%. Stanislaus County had the highest White, non-Hispanic population at 49.6%, a decrease from 53.8% in 2007. Fresno County had the least population change for White, non-Hispanic residents. The percentage of African Americans in six of the eight SJV counties was lower than the state percentage of



6.7%. Kings and San Joaquin counties had a higher percentage at 8.3% and 8.0% respectively. The percentage of Asian residents varied widely between counties with a low of 2.1% in Madera County and a high of 13.8% in San Joaquin County. Seven of the eight valley counties had a lower percentage of Asian residents than did California as a whole, 12.5% (U.S. Census Bureau, American Community Survey, 2009). Despite the lower percentage of Asian residents, the Central Valley, particularly Fresno and Merced counties, have the largest

concentration of Laotian and Hmong refugees in the United States (The California Endowment, 2002). In 2000, SJV residents represented more than 70 ethnicities and spoke approximately 105 languages, making the region among the most culturally diverse in California and the nation.

The extent to which an area is racially segregated may impact these populations' health outcomes. (McNeill, Kreuter, & Subramanian 2006; Schulz, Williams, & Lempert 2002; Richardson & Norris 2010) Racial and ethnic groups are concentrated differently across the SJV. (U.S. Census Bureau 2010) Although at the county level, racial and ethnic distribution across the valley shows few significant differences, smaller geographies reveal several areas of higher racial or ethnic segregation. For example, several census tracts in the western portions of Kern, Fresno and Tulare counties are more than 90% Hispanic. The western portion of Madera and southern and western regions of Kern also show ethnic segregation, with more than 80% non-Hispanic white. The majority of the Asian population resides in San Joaquin County, where Asians account for 13.5% of the county population and, in a number of census tracts, more than one-third of the population. The Black population is concentrated in Fresno, Kern and San Joaquin counties. In the urban areas of Stockton, Modesto, Bakersfield and Fresno, Hispanic residents are concentrated in the south while the White populations occupy the northern parts of the cities. Map 2 displays the racial and ethnic distribution of SJV residents.

The Economy

Nationwide in 2009, 22% of households had incomes below 150% of the federal poverty threshold. (U.S. Census Bureau 2009) In the SJV, 49% of zip codes (115) met or exceeded this level of poverty; this is markedly higher than the state of California, where 31% of ZIP codes met or exceeded this level. Areas of concentrated poverty in SJV, where at least 40% of the population in a zip code had an income below 150% of the Federal Poverty Level, are in southeast Kings County, southwest Tulare County, northwest Kern County, and areas of Fresno County (see Map 3).

The SJV provides much to the nation's food supply, and agriculture is the backbone of its economic survival (Great Valley Center, n.d.). The valley is one of the largest rural and agricultural areas in the world, and food production is the leading industry in each of the eight counties. Our agricultural-based and rapidly urbanizing economy are contributors to the poor average economic situation in the SJV. Persistent poverty, a large population of migrant and low paid workers, and low educational attainment are also contributing factors.

Valley residents have among the lowest per capita personal incomes, higher rates of unemployment, and more residents living below the Federal Poverty Level (FPL) than California as a whole (Table 2). In 2008, Madera County had the lowest per capita income in the valley, and all eight counties had a higher unemployment rate than the state (11.4%), with Tulare County having the highest annual unemployment rate at 18.4% and Merced County following closely by at 17.2%; the SJV has an average annual unemployment rate at 15.6% (U.S. Bureau of Economic Analysis, 2009). Though all valley counties have a higher percentage of residents living below the FPL than California, Tulare (25.8%), Fresno (24.0%), and Kings (23.9%) by far have exceeded the state percentage of 15.7% (UCLA Center for Health Policy Research, 2007). It should be noted that these rates are before the start of the 2008 recession, and unemployment during which the Employment Development Department reported an incredible and unprecedented unemployment levels since the early 1940s (The Employment Development Department, State of California, 2011).

Demographic Characteristics	Fresno	Kern	Kings	Madera	Merced	San Joaquin	Stanislaus	Tulare	San Joaquin Valley	California
Population	930,450	839,631	152,982	150,865	155,793	685,306	514,453	442,179	3,971,659	37,253,956
Population per Square Mile	156.0	103.1	110	70.6	132.6	489.8	344.4	91.7	184	238.9
% White, non- Hispanic	32.7%	38.6%	35.2%	38.0%	31.9%	35.9%	46.7%	32.6%	39.2%	40.1%
% Hispanic/ Latino	50.3%	49.2%	50.9%	53.7%	54.9%	38.9%	41.9%	60.6%	47.2%	37.6%
% American Indian	1.7%	1.5%	1.7%	2.7%	1.4%	1.1%	1.1%	1.6%	2.0%	1.0%
% Asian	9.6%	4.2%	3.7%	1.9%	7.4%	14.4%	5.1%	1.6%	5.9%	13.0%
% Pacific Islander	0.2%	0.1%	0.2%	0.1%	0.2%	0.5%	0.7%	3.4%	0.3%	0.4%
% African American	5.3%	5.8%	7.2%	3.7%	3.9%	7.6%	2.9%	1.6%	5.1%	6.2%
% Multirace	4.5%	4.5%	4.9%	4.2%	4.7%	6.4%	5.4%	4.2%	2.4%	4.9%
% 0-17 Years	39.2%	40.2%	36.5%	38.0%	41.3%	38.5%	37.5%	42.8%	30.3%	23.0%
% 18-64 Years	51.0%	50.8%	55.8%	51.6%	48.8%	51.4%	52.0%	47.8%	59.0%	65.8%
% Over 65 years	9.8%	9.0%	7.7%	10.4%	9.9%	10.1%	10.5%	9.4%	9.5%	11.2%
Per Capita Personal Income	\$30,997	\$30,047	\$26,734	\$26,524	\$27,871	\$31,547	\$31,485	\$28,610	\$29,227	\$42,325
% 25 years without High School Diploma	26.8%	29.8%	30.8%	31.4%	33.7%	24.3%	24.8%	32.4%	29.3%	19.7%
Annual Unemployment Rate	15.1%	14.4%	14.6%	13.8%	17.2%	15.4%	16.0%	18.4%	15.6%	11.4%
% of Total Population Below 100% of FPL	27.8.0%	25.4.7%	26.9%	23.6%	24.4%	23.5%	17.2%	27.7%	24.7%	17.8%
% of Children Under 18, in Families with Income Below 100% of the FPL	34.3%	35.5%	34.0%	35.2%	36.5%	48.3%	38.5%	40.1%	38.1%	33.9%

Table 2: San Joaquin Valley Demographics, 2010

Sources:

1. U.S. Census Bureau. American Community Survey 2010

2. UCLA Center for Health Policy Research, 2009.

3. U.S. Bureau of Economic Analysis, 2008

4. California Employment Development Department, Labor Market Information Division, 2009.

Map 2: Racial and Ethnic Distribution, San Joaquin Valley, 2005-2009



Map 3: Household Below 150% FPL Threshold, by ZIP Code, San Joaquin Valley 2009





THE VALLEY'S PROGRESS TOWARD MEETING HEALTHY PEOPLE 2010 OBJECTIVES

Physical Activity

Objective 22-2: Increase to 30% the Proportion of Adults Who Engage Regularly, Preferably Daily, in Moderate Physical Activity for at Least 30 Minutes per Day.

In 2010, the Surgeon General called on strengthening and expanding on her 2001 predecessor's call to action "to prevent and decrease overweight and obesity by choosing nutritional food and increasing physical activity" to improve health-related quality of life by enhancing psychological well-being and by improving physical functioning in persons compromised by poor health. Furthermore, physical activity appears to relieve symptoms of depression and anxiety and improve mood (CDC, National Center for Chronic Disease Prevention and Health Promotion, 1996; 2010). Other benefits of regular physical activity include reduced risks for coronary heart disease, diabetes, colon cancer, hypertension, and osteoporosis. In addition, physical activity can enhance physical functioning and aid in weight control (National Center for Health Statistics, 2004).

In 2007, 19.1% of SJV adults, age 18 and over, reported doing moderate physical activity. An additional 17.9% of adults reported doing vigorous physical activity. This resulted in 37.0% of valley adults that reported engaging in some vigorous/moderate physical activity in 2007. Less than one-fifth of valley adults (15.5%) reported no physical activity at all (UCLA Center for Health Policy Research, 2007). American Indian/Alaska Natives were reported as having the lowest percentage of no physical activity at 23.0% compared to Whites at 15.0%.

In 2007, the percentage of adults in California as a whole reported engaging in some moderate activity was comparable to the SJV (18.9%). An additional 17.4% of California adults reported doing vigorous activity for a total of 36.3% of California adults engaging in moderate or vigorous physical activity. It was reported in the 2007 CHIS that Asians had the lowest percentage engaging in vigorous physical activity at a low of 14.2% while Whites were at a high of 19.7%. In California, 14.0% of adults reported not engaging in any physical activity. As a whole, American Indian/Alaska Natives also reported having the highest percentage of no physical activity (19.7%) while Whites reported the least in this category (12.1%).



Between 2000 and 2007, there was little change in the percentage of adults engaging in usual daily activities and leisure-time physical activities. The changes in estimates that occurred were generally not significant. In instances where differences were statistically significant, adults were slightly more active in 2007 than in 2000 (CDC, 2007). In 2007, the percentage of adults at the national level who reported not engaging in any physical activity was 24.1% (CDC, 2007). This was much higher compared to the state and the SJV.

Objective 22-7: Increase to 85% the Proportion of Adolescents Who Engage in Vigorous Physical Activity that Promotes Cardiovascular Fitness Three or More Days per Week for 20 or More Minutes per Occasion.

Research has shown that adolescents who get daily vigorous physical activity tend to be leaner and fitter than their less active peers. As an example, a 2004 study of 878 California adolescents showed that a lack of physical activity was the main contributor to obesity in adolescents ages 11 to 15 (News-Medical Net, 2004). In 2005, 64.0% of high school students nationally reported participating in sufficient vigorous physical activity. This was lower than the 66.5% of California teens, ages 12-17, who reported participating in recommended levels of regular physical activity. Only 55.0% of female and 70.0% of male high school students nationally reported a level of physical activity that met the criteria for the recommended amount of either moderate or vigorous physical activity (CDC, Division of Adolescent and School Health, 2005).

According to the 2007 CHIS, 65.4% of male adolescents and 64.2% of female adolescents, ages 12-17, in the SJV reported engaging in vigorous physical activity three or more days per week. This was lower than the percentage statewide where 71.1% of adolescent males and higher than the 58.1% of adolescent females, ages 12-17, reported engaging in vigorous physical activity three or more days per week (UCLA Center for Health Policy Research, 2009). Kings County has the highest percentage of teen physical activity of 76.4% while Merced County has the lowest percentage of 54.7%. Male adolescent rate of vigorous physical activity is slowly starting to decline compared to female adolescents. Three of the eight counties show that male adolescents participate more in vigorous physical activities compared to female adolescents; these include Kern, Kings, and Tulare counties. However, the overall percentages for teen vigorous physical activity indicate that male adolescents' percentage (65.4%) is comparable to female adolescents' percentage (64.2%).

On the most recent 2009 CHIS, it was reported that 38.5% of adolescents are physically active for at least one hour on a typical week for 5 - 7 days of the week, not including physical education at school. Almost a fifth (17.3%) of SJV adolescents indicated that they were not physically active for at least one hour a day during a typical week. Tulare County shows the highest percentage (30.3%) of adolescents being physically active one hour a day for seven days as compared to San Joaquin County with the lowest percentage of 11.4%. However, the SJV (16.5%) was comparable to the state (15.2%) at being physically active for at least one hour a day for seven days of the week (UCLA Center for Health Policy Research, 2011).

The 2007 CHIS data, by gender and ethnicity, showed a lower percentage of SJV Latino girls (62.1%) compared to White, non-Latino, girls (67.7%), ages 12-17, engaging in vigorous activity three or more days per week. No comparison on ethnicity and boys were found on physical activity level. By ethnicity alone, multi-racial adolescents had the lowest percentage of vigorous physical activity (56.5%) in the valley followed by Latino adolescents. However, 2007 data showed that 87.8% of African American adolescents, in the valley, reported engaging in vigorous physical activity three or more days per week compared to 2005 data of 68.75% (UCLA Center for Health Policy Research, 2007; 2005).

Overweight and Obesity

Objective 19-2: Reduce the Proportion of Adults Who Are Obese to 15% of the Population.

Obesity is becoming the critical health condition of this era. Over the last decade California has experienced one of the largest percentage increases in adult obesity in the nation. The percentage of California residents who were considered to be obese grew from 21% in 2001 to 24% in 2008, an increase of approximately 3% (CDC, 2008). Nationwide, the prevalence of adults in the U.S. who are obese is still high, with about one-third of adults obese in 2007-2008, although new data suggest that the rate of increase for obesity in the U.S. in recent decades may be slowing, according to a CDC study appearing in the January issue of Journal of American Medical Association (Flegal et al., 2010).

Approximately 36% of California's adults are considered overweight and another 24% are considered obese, according to 2007 Behavioral Risk Factor Surveillance System data. In contrast, in 2005, only four states had an obesity prevalence of 15-19%; 43 states, including California, had a prevalence of 20-29%; and three states had an obesity prevalence of equal to or more than 30% (CDC, 2007).

The 2001 and 2009 CHIS used self-reported height and weight to determine "overweight or obesity." In this analysis, overweight or obese will be used as a measure for comparison purposes. In the SJV, 2009 CHIS data show that 67.9% of nonelderly adults, ages 18-64, reported being overweight or obese. This was slightly more than the 65.1% of adults in this age group who reported being overweight or obese in the 2001 CHIS. In 2009, the percentage of SJV nonelderly adults who reported being overweight or obese was higher than the state (57.2%) but similar to the 2006 national percentage of 66% (National Center for Health Statistics, 2006, 2009). The 2009 percentage of valley seniors, age 65 and over, who reported being overweight or obese (72.2%) was much higher than the percentage in 2003 (66.4%) and notably higher than in 2001 (56.5%), suggesting an increasing trend.

County	Ages 12-17		Ages 18-64		Ages 65+	
County	2001	2009	2001	2009	2001	2009
Fresno	14.1%	24.7%	65.0%	64.8%	55.3%	71.1%
Kern	7.7%*	6.5%*	61.4%	65.2%	50.8%	67.6%
Kings	16.3%	17.7%*	63.5%	77.9%	58.0%	85.8%
Madera	11.5%*	27.1%*	66.1%	68.4%	58.6%	74.7%
Merced	18.2%*	17.1%*	67.4%	64.8%	67.2%	77.4%
San Joaquin	17.9%	15.0%*	66.9%	68.1%	62.3%	72.0%
Stanislaus	12.9%*	17.0%*	62.8%	72.4%	53.4%	77.7%
Tulare	7.6%*	20.7%*	71.0%	72.2%	56.1%	67.0%
San Joaquin Valley	12.8%	17.2%	65.1%	67.9%	56.5%	72.2 %
California	12.2%	13.3%	55.0%	58.9%	54.3%	62.1 %
Healthy People 2010 Objective	5.0%	5.0%	15.0%	15.0%	15.0%	15.0%

Table 3: Overweight and Obesity by Age Group, San Joaquin Valley and California, 2001 and 2009

Source: UCLA Center for Health Policy

Research, 2003; 2009

* Statistically unstable

Statewide, the percentage of seniors who reported being overweight or obese has also increased from 54.3% in 2001 to 62.1% in 2009 (UCLA Center for Health Policy Research, 2003; 2009). In 2009, the percentage of valley adults who reported being overweight or obese was more than four times higher than the HP 2010 goal (Table 3).

Objective 19-3: Reduce the Proportion of Children and Adolescents Who Are Overweight or Obese to 5% of the Population.

A comparison of 2001 and 2007 CHIS data shows an increase in overweight or obesity among SJV adolescents , ages 12-17, from 12.8% in 2001 to 17.2% in 2007. This percentage was higher than the percentage of overweight or obesity adolescents statewide at 13.3% (Table 3). Data from NHANES surveys (1976–1980 and 2003–2006) show that the prevalence of obesity has also increased nationwide. For children aged 2–5 years, prevalence increased from 5.0% to 12.4%; for those aged 6–11 years, prevalence increased from 6.5% to 17.0%; and for those aged 12–19 years, prevalence increased from 5.0% to 17.6% (CDC, 2006).

The disparities among overweight California adolescents are evident when looking at differences between gender, race/ethnicity, and income. Based on the 2007 CHIS data, 23.6% of California male adolescents were classified as overweight and obese compared to 13.6% of female adolescents. The same data source shows that Latino and African American adolescents were at risk for being overweight and obese significantly more than those from other ethnic groups. Nearly 26% of African American and 24% Latino teens experience obesity (UCLA Center for Health Policy Research, 2009). Being overweight and obese are also income-related; teens living in poor households (below 100% FPL) are more likely to be overweight or obese than those from households 300% of the FPL and above, 18% and 9%, respectively (UCLA Center for Health Policy Research, 2009).

A recent California study that examined physical activity and the relationship to overweight and obesity in adolescents, ages 11-15, showed more Latino girls (54.8%) than non-Latino, White girls (42.0%) were either overweight or at risk for obesity. No difference was found for weight status between boys based on ethnicity (News-Medical.Net, 2004). When comparing this with SJV data, the opposite is true. In 2005, more Latino than White adolescent boys, ages 12-17, reported being overweight or obese at 19.3% and 12.9% respectively. Similarly, there was a difference in the percentages of adolescent Latino and White girls in the valley who reported being overweight or obese at 15.8% and 9.3% respectively (UCLA Center for Health Policy Research, 2007). It is important to note that Table 3 continues to show statistically unstable data for adolescent overweight or obesity in most counties in both 2001 and 2007.

It is apparent that the SJV did not meet the HP 2010 objectives for the reduction of obesity in adults and adolescents. Although available data do not address overweight/obesity in children under 12, the percentage of adolescents who are overweight or obese is indicative of a continuing health concern for overweight/obesity among younger children in the valley.

Tobacco Use

Objective 27-1a: Reduce Cigarette Smoking by Adults to 12% of the Population.

Cigarette smoking has been identified as the most important source of preventable morbidity and premature mortality worldwide (American Lung Association, 2008). Comparison of 2001 and 2009 CHIS data for adult smoking (Figure 1) for the SJV showed that the percentage of adults, age 18 and over, who reported being a current smoker has been decreasing from 19.0% in 2001 to 15.5% in 2009. Furthermore, the percentage of adults who reported never smoking increased from 56.9% in 2001 to 62.0% in 2009. In keeping with this finding, the percentage of adults who reported being former smokers decreased slightly from 24.1% in 2001 to 22.7% in 2009. The percentage of current smokers in the SJV was higher than the state as a whole, with 13.5% of adults statewide reporting that they were current smokers in 2009 and 63.5% reporting that they had never smoked (UCLA Center for Health Policy Research, 2003; 2011). In 2005, SJV had a lower percentage of adults who smoked than the nation at 21.0% (American Lung Association, 2007). According to 2009 CHIS data, Tulare County has the highest percentage of current smokers (19.0%) followed by Kern (17.1%). Based on these results, the percentage of smokers in most valley counties continues to be higher than the HP 2010 objective of 12.0% for adult smokers.



Objective 27-2b: Reduce Cigarette Smoking by Adolescents to 16% of the Population.

As the leading cause of preventable death and disease in the United States, smoking is associated with a significantly increased risk of heart disease, stroke, lung cancer, and chronic lung disease (National Center for Health Statistics, 2004). The 2007 National Survey on Drug Use and Health (NSDUH) showed that 41.8% of young adults nationally, ages 18 to 25, reported currently using a tobacco product. An estimated 3.1 million youths nationally (12.4%), ages 12-17, reported using a tobacco product during the past month (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008).

The 2009 CHIS showed that 3.9% of SJV teens, ages 12-17, reported being a current smoker. This is slightly lower than California as a whole where 4.2% of adolescents reported being a current smoker. The racial/ethnic background of valley adolescents who reported being a current smoker varied widely. Because of unstable or not reported numbers for some racial/ethnic groups in the SJV, teen smoking cannot be reported by race/ethnicity for the year 2009. Statewide reports for 2007 indicate that American Indian/Alaska Native teens have the highest percentage of current smokers at 20.9%, multi-racial teens at 5.7%, White, non-Hispanic teens at 5.6%, and Latinos at 5.6%. Asian teens reported the lowest percentage at 2.4% (UCLA Center for Health Policy Research, 2009). Cigarette smoking among valley adolescents appeared to be lower than national rates for most ethnicities except for White, non-Hispanic teens at 10.1%. Most percentages were almost less than half the HP 2010 objective.



Figure 1: Percentage of Current Adult Smokers in the San Joaquin Valley and California, 2001 and 2007

Source: 2001 and 2009 CHIS data for adult smoking in the San Joaquin Valley and California

Substance Abuse

Objective 26.10a: Increase to 89% the Proportion of Adolescents Not Using Alcohol or Any Illicit Drugs During the Past 30 Days.

Studies have shown that using alcohol and tobacco at a young age increases the risk of using other drugs later in life. Some teens will experiment and stop, or continue to use occasionally, without significant problems. Others will develop a dependency, perhaps moving on to more dangerous drugs and causing significant harm to themselves and possibly others. Results from the 2007 (NSDUH) showed substantial variations in the rates of substance dependency by age. For example, 3.3% of youths aged 12 or 13 reported current illicit drug use in 2007. As in prior years, illicit drug use in 2007 tended to increase with age among young persons, peaking among 18 to 20 year olds (21.6%) and generally declining after that



point as age increased (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008).

In 2009, 63.7% of SJV adolescents, ages 12-17, reported that they had never had an alcoholic drink; this is comparable to California at 66.6% (UCLA Center for Health Policy Research, 2011). However, adolescents in the valley did not meet the 89% goal set by HP 2010. CHIS 2009 data shows that Merced County has the highest percentage of adolescents who had never had an alcoholic drink (75.8%) while Stanislaus County has the lowest percentage (51.1%).

As a proxy indicator for alcohol, we compared the

percentage of valley adolescents who reported never having an alcoholic drink between 2001 and 2009. The 2001 CHIS data showed that 70.5% (253,000) of SJV adolescents reported never having an alcoholic drink. In 2009, 63.7% (254,000) of valley adolescents reported never having an alcoholic drink. Although this does not appear to reflect a significant change, it does show that perhaps 13,000 more adolescents reported never having an alcoholic drink in 2007. The 2007 CHIS data show that Asian adolescents reported the highest percentage (87.4%) of never having an alcoholic drink while Whites and other races reported the lowest percentages at 61.4% and 57.5%, respectively. The percentages of California teens who reported never having an alcoholic drink were similar to the valley in 2001 (68.9%) and 2007 (65.7%) (UCLA Center for Health Policy Research, 2003; 2009).

Nationwide, according to the 2007 NSDUH, nearly 27.9% of Americans between ages 12-20 report current alcohol consumption, which was lower than the percentage of underage persons, ages 12-20, in the SJV (32.6%) and California (42.3%) who reported binge drinking in 2007 (U.S. Department of Health and Human Services, 2008; UCLA Center for Health Policy Research, 2009).

Data on drug and alcohol use among adolescents in the SJV counties showed a difference in the use of drugs at an early age. For example, 15% of Fresno County male children 11-12 years of age had drank a full glass of alcohol and 5.0% had used an inhalant drug during the past 30 days, while the rate was 16.0% and 6.0% respectively for females. Additionally, the percentage of adolescents who reported using alcohol and other drugs increased with age with 18.0% percent of 7th graders, 31.0% of 9th graders, and 36.0% of 11th graders in the past 30 days (California Department of Education, 2007).

Objective 26-10c: Reduce the Proportion of Adults Using Any Illicit Drug During the Past 30 Days to 2% of the Population.

There was no data available specific to the SJV to measure progress toward a decrease in the use of illicit drugs by adults or to compare with the HP 2010 objective. However, national data indicate that in 2007, 19.7% of persons ages 18-25 and 5.8% of persons ages 26 or older reported using illicit drugs, including marijuana, during the month prior to the NSDUH survey. These percentages were comparable to 2002 data with 20.2% of 18-25 year olds and 5.8% of ages 26 and over reported using illicit drugs during the month prior to the survey (U.S. Department of Health and Human Services, 2008).

Another basis for a comparison of drug use is the rate of drug induced deaths. Illicit drug use is associated with suicide, homicide, motor-vehicle injury, HIV infection, pneumonia, violence, mental illness, and hepatitis. An estimated 3 million individuals in the United States have serious drug problems. Several studies have reported an undercount of the number of deaths associated with illicit drug use, which are included in this category. It is estimated that illicit drug use resulted in approximately 17,000 deaths nationally in 2000, a reduction of 3,000 deaths from 1990 (Mokdad, Marks, Stroup, & Gerberding, 2004).

The HP 2010 objective 26-3: Reduce drug induced deaths to 1.0 death per 100,000 persons was used as a surrogate indicator for illicit drug use. Among the SJV counties, Stanislaus County had the highest rate of drug-induced deaths per 100,000 persons, using three-year averages, with a rate of 18.0 for 2001-2003 and 17.2 for 2006-2008. Madera County had the lowest rates of drug-induced deaths in the same time periods at 7.3 and 8.0 respectively. As shown in Figure 2, the SJV counties and California were well above the HP 2010 objective of 1.2 deaths per 100,000 persons (California Department of Public Health, 2009).



Figure 2: Age Adjusted Drug Induced Death Rate

Source: 1. California Department of Public Health, Center for Health Statistics. 2006-2008 Birth and Death statistical Mater files 2. County Health Status Profile, 2010

Objective 26-11c: Reduce the Proportion of Adults Engaging in Binge Drinking of Alcoholic Beverages During the Past Month to 6% of the Population.

The 2009 CHIS data showed an increased percentage of SJV adults, age 18 and over, who reported binge drinking at 15.8% in 2001, 29.8% in 2007 and 32.4%. Even though this increase was comparable to binge drinking among adults statewide at 15.4% in 2001, 29.7% in 2007 and 31.3% in 2009 (UCLA Center for Health Policy Research, 2003; 2009), the percentage of valley adults who reported binge drinking remains five times greater than the HP 2010 objective of 6% (Figure 3).

Nationally, young adults, ages 18-25, reported the highest percentage of binge drinkers in 2007, with peak usage at age 21. The rate of binge drinking was 42.1% for young adults ages 18-25 and 49.9% at age 21 (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2006). The 2007 CHIS data showed that young adults, ages 18-25, in both the SJV (41.6%) and California (45.5%) had a similar percentage of binge drinkers compared to the nation. For the valley, CHIS shows that Latinos reported the highest percentage for binge drinking in the past year at 30.5% while African Americans reported a low of 18.7%. At the state level, American Indian/Alaska Natives reported the highest percentage at 36.7% and Asian reported the lowest at 18.1%. Whites reported a high level of binge drinking at the valley and the state level (29.9% and 31.2% respectively).

Figure 3: Binge Drinking Among Adults, Age 18 and Over, in the San Joaquin Valley and California, 2001 and 2009



Source: UCLA Center for Health Policy Research, 2003; 2009

Objective 13-6: Increase the Proportion of Sexually Active Persons Who Use Condoms to 50% of the Population.

13-6a. Females Ages 18 to 44 Years 13-6b. Males Ages 18 to 49 Years

In a 2002 national survey, 90% of sexually experienced women, ages 15-44, reported that they had used a condom at some time. Additionally, of women who reported that they were currently using a contraception method, 11.1% reported using the male condom as their most effective contraceptive method (Mosher et al., 2004). As current data were not available to address the use of condoms by SJV adults, the prevalence of sexually transmitted infections (STIs) was used as a surrogate indicator for the lack of condom use by adults.

Sexually transmitted infections are a consequence of risk-taking behavior, specifically unprotected sexual activity. Condoms are the only contraceptive method proven to reduce the risk of STIs, including HIV (WHO, 2000). Chlamydia is the most frequently reported sexual infectious disease in the United States (CDC, Division of Sexually Transmitted Disease, n.d.). Maps 4 and 5 and Table 4 depict the 2009 chlamydia and gonorrhea cases and rates per 100,000 for males and females in the SJV counties, region and the state. The 2009 chlamydia data by local health jurisdiction indicated substantial differences across the state (Map 5). Regions, extending from Sacramento County to San Diego County, had the highest rates (greater than 300 per 100,000).

The rates for chlamydia cases were higher for the SJV female overall and dramatically higher for Fresno, Madera, and San Joaquin counties females and Kern County females and males than California as a whole. The rates for gonorrhea cases for the SJV females were slightly higher than California and significantly higher in Kern County. Gonorrhea cases for SJV males were lower than the state as a whole but slightly higher in Kern and San Joaquin counties (California Department of Health Services, STD Control Branch, 2009).



Map 4: All California Counties - Rates of Chlamydia Infections, per 100,000 Person, 2009



Map 5: All California Counties – Rates of Gonorrhea Infections, per 100,000 persons, 2009

Geographic Distribution

The highest rates per 100,000 population were reported in the following local health jurisdictions: Kern (622.8), Fresno (574.3), Long Beach (509.5), San Joaquin (508.7), San Francisco (490.2), Sacramento (469.8), Solano (465.3), and Los Angeles (452.3). On a regional basis, the Central Valley and southern regions, extending from Sacramento County to San Diego County, had the highest rates (greater than 300 per 100,000). In addition, chlamydia incidence is affected by the proportion of the population comprising the age groups with the highest chlamydia rates: adolescents and young adults. When the 2009 case incidence was calculated for females in the 15- to 24-year-old age group, Fresno (3,711.3) and Kern (3,099.5) were among the jurisdictions with the highest incidence per 100,000.

Trend and Morbidity

When the 2009 chlamydia data was compared with 2008 data, decreases in the numbers and rates of reported cases were evident in more than half of the health jurisdictions. Among high-morbidity jurisdictions (greater than 1,000 cases), rate decreases of more than 10% were experienced by Stanislaus County (a decrease of 14.4 percent, from 376.9 to 322.6) and Tulare County (13.4 percent, from 414.5 to 358.9). No high-morbidity jurisdictions experienced a notable increase in chlamydia rates between 2008 and 2009.

	For	Chlai	mydia	Gonorrhea Formala				
County	r en	Rate	Cases	Rate	rem Cases	Rate	Ma Cases	Rate
	Cuses	Пине	Cuses	Пине	Cuses	пине	Cuses	Кине
Fresno	4,216	880.6	1,224	251.9	381	79.6	341	70.2
Kern	2,944	707.3	2,249	514.7	485	116.5	339	77.6
Kings	363	513.5	149	164.9	19	26.9	18	19.9
Madera	556	681.9	77	100.4	39	47.8	15	19.6
Merced	669	503.9	189	140.1	45	33.9	27	20.0
San Joaquin	2,467	678.3	1,041	289.0	290	79.7	271	75.2
Stanislaus	1,299	464.4	394	146.1	76	27.2	78	28.9
Tulare	1,201	528.0	396	172.8	61	26.8	39	17.0
San Joaquin Valley	13,715	619.7	5,719	222.5	1,396	54.8	1,128	41.0
California	101,172	522.0	44,804	232.1	9,784	50.5	13,992	72.5

 Table 4: Chlamydia and Gonorrhea Cases and Rates per 100,000 in the San Joaquin Valley and California, 2009

Note: Rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch, 2009

Gender

The 2009 data continued to demonstrate large differences by gender that reflect the differential screening rates noted above, as well as differential acquisition and transmission rates. From 1990 to 2007, chlamydia rates for females were consistently about three times higher than rates for males, though in 2008 and 2009 the rates for females were closer to about two times higher than rates for males. In 2009, the female chlamydia rate was 522.0 per 100,000, compared with the male rate of 232.1.

Age

Case-based chlamydia surveillance data by age have consistently shown the highest rates to be among adolescents and young adults. Prior to 2000, the highest rates were among females between the ages 15 and 19; however, the 2000–2009 data consistently showed the highest rates to be among females between the ages 20 and 24 (2,777.4 per 100,000 in 2009). Although male rates were lower, the age trends were similar to those for females, with the highest rates also between the ages 20-24 (1,033.9).

Race/Ethnicity

Consistent with patterns seen since 1990, the 2009 data indicated that chlamydia rates for African Americans/Blacks (1,011.9 per 100,000) were higher than rates for Latinos (334.1), Native Americans/Alaskan Natives (174.1), non-Latino whites (121.6), and Asians/Pacific Islanders (118.1) (Table 3). Compared to rates for 2008, chlamydia rates remained relatively stable among non-Latino whites, African Americans/Blacks, and Asians/Pacific Islanders, while rates decreased 14% among Native Americans/Alaskan Natives and 3.9% among Latinos. Furthermore, the large disparities in rates of chlamydia by race/ethnicity were seen among both males and females. African American/Black females had a rate of chlamydia nearly eight times that of non-Latina white females (1,277.8 per 100,000 and 160.2, respectively); correspondingly, African American/Black males had a rate of chlamydia nearly nine times that of non-Latina white females, while Latino males had a rate of chlamydia (490.1) more than three times that of non-Latina white females, while Latino males had a rate (183.2) more than two times that of non-Latino white males.



Objective 25-11: Increase to 95% the Proportion of Adolescents Who Abstain from Sexual Intercourse or Use Condoms, if Currently Sexually Active.

The 2009 CHIS data show increase for SJV adolescents, ages 14-17 that reported having sexual intercourse at some time during their life time, 24.9% compared to 20.3% in 2001. However, in 2007, about 92.9% of male adolescents in the valley, ages 14-17, reported using a condom during their last experience of sexual intercourse; this was slightly lower than statewide percentage (94.5%). In 2009, the percentage of valley adolescents who reported abstaining from sexual activity at 75.1% was lower than the statewide percentage at 80.8% but still greater than national percentages at 52.2% (UCLA Center for Health Policy Research, 2009; CDC, 2008a). Figures 4 and 5 illustrate that the valley is not meeting the HP 2010 objective of 95% adolescents using condoms or abstaining from sexual intercourse. County and region-specific estimates from the 2009 CHIS regarding adolescents who abstain from sexual intercourse or use condoms show that Kern and Kings counties has the highest percentage (88.1% and 84.2%, respectively) and comes closest to meeting the HP 2010 objective of 95%. Stanislaus County was the farthest from the objective at 55% of adolescents reporting they abstained from sexual intercourse.

Another indicator that valley adolescents are not abstaining from sexual intercourse or using condoms is the high teen birth rate. Despite a downward trend in teen births since the early 1990s, in 2004 the SJV counties had among the highest teen birth rates in the state. In 2009, Tulare, Kern and Kings counties had the highest teen birth rates in the state at 64.1, 60.3, and 55.6 respectively, per 1,000 females, under 20 years of age. The valley counties' rates were much higher than the teen birth rate in California as a whole, at 32.5 births per 1,000 females, under age 20 (California Department of Health Services, Maternal and Child Health Epidemiology Section, 2009). While California met the HP 2010 objective 9-7: to reduce pregnancies among adolescent females to 43 per 1,000 females ages 15-19, six of the valley counties did not meet this objective. Stanislaus and San Joaquin counties met the HP 2010 objective at 36.2 and 39 births per 1,000 females, under age 20 as shown in Figure 6.



Figure 4: San Joaquin Valley and California Adolescents, Ages 14-17, Who Have Not Had Sexual Intercourse, 2009

Source: California Department of Health Services, Maternal and Child Health Epidemiology Section, 2009

Figure 5: Males, Ages 15-17, in the SJV and California Who Reported Using a Condom During Last Sexual Intercourse, 2007



Source: California Department of Health Services, Maternal and Child Health Epidemiology Section, 2009

Figure 6: Teen Birth Rates, Ages 15-19, per 1,000 in the San Joaquin Valley Counties and California, 2009



Source: California Department of Health Services, Maternal and Child Health Epidemiology Section, 2009
Mental Health

Objective 18-9b: Increase to 50% the Proportion of Adults with Recognized Depression Who Receive Treatment.

Mental disorders are among the most common of the chronic diseases affecting the U.S. population. These chronic diseases affect an estimated one in five adults nationally during their lifetime (U.S. Department of Health and Human Services, Center for Mental Health Services, 1999). In 2001 the National Institute of Mental Health reported that in the state of California 5.4% (1,385,837) of the population age 18 and older have a serious mental illness. This estimate did not include persons who are homeless or who are institutionalized (National Institute of Mental Health, 2001). A recent report from the state Senate Office of Research claims one in five California adults suffers from mental disorders

and one in 25 suffers from a serious mental illness (Iqbal, M. 2011).

The 2007 CHIS found only 35.1% of SJV and 33.6% of California adults age 18 and older who reported having psychological distress in the past year (an indicator for major depression), saw a health professional. The percentage has drastically increased since the 2001 CHIS. In 2001, 23.1% of SJV adults and 15.2.% of California adults reported depression and were seeing a health professional. Data from CHIS 2009 show 56.6% of adults who self-reported mental/ emotional and/or alcohol/drug



issue(s) sought professional help. According to 2009 CHIS data, Madera County reported the highest percentage seeking health professionals (62.4%) among the eight valley counties followed by Stanislaus (59.7%) whereas Merced County was the lowest at 50.1%, still achieving the 50% objective for HP 2010. The percentage of those who thought seriously about committing suicide is lower in California (8.7%) than the SJV(9.2%) with Kings County indicating the highest percentage (12.7%) and Fresno County the lowest at 6.9% (CHIS,2009).

A recent article by the World Health Organization (WHO) indicates that lifetime prevalence rates for any kind of psychological disorder are higher than previously thought, are increasing in recent cohorts and affect nearly half the population. Furthermore, the article states patients, too, appear reluctant to seek professional help. Only two in every five people experiencing a mood, anxiety or substance use disorder are seeking assistance in the year of the onset of the disorder (WHO, 2011).



Figure 7: Suicide Rates, per 100,000 Persons, in the San Joaquin Valley and California, 2001 and 2007

Source: Rand California, County-Level Death Statistics by Place of Decedent's Death, 2010

Suicide is the most dreaded complication of major depressive disorders and other mental health challenges. A review of psychological autopsies conducted by Angst, Angst, and Stassen (1999) estimated that approximately 10-15% of patients formerly hospitalized with depression committed suicide. When looking at all deaths by suicide, approximately 20-35% of deaths were among individuals who had been diagnosed with a major depressive disorder and received treatment at some point (Angst et al., 1999). In 2002, 132,353 individuals in the U.S. were hospitalized following a suicide attempt. An additional 116,639 individuals were treated in emergency departments following a suicide attempt and then released (CDC, National Center for Injury Prevention and Control, 2004). In 2007, the age adjusted rate due to suicide was 11.27 per 100,000 deaths in U.S. and 9.95 for California (CDC, 2007).

An increase in the suicide rate is evidence of the lack of access to mental health care. In 2006, suicide was the eleventh leading cause of death in the U.S, accounting for 33,300 deaths (NIMH, 2009). Figure 7 shows increases in the rates, per 100,000 persons, of deaths from suicide in six of the eight SJV counties between 2001 and 2007. Suicide rates in California as a whole increased slightly from 9.3 per 100,000 persons in 2001 to 10.3 in 2008 (RAND California, 2010). Two of the valley counties, San Joaquin and Stanislaus, exceeded the state rate of 10.3 per 100,000 persons at 10.9 and 10.6, respectively. In 2008, none of the SJV counties met the HP 2010 objective of reducing the suicide rate to 5.0 suicides per 100,000 persons. Merced County had the lowest rate of 6.5 per 100,000 persons followed by Tulare County at 6.6. Madera County's rate of suicide death rate per 100,000 persons increased significantly from 5.0 in 2004 to 9.5 in 2008 (RAND California, 2010). Consequently, by race/ethnicity, Whites usually had the highest percentage of suicides in the valley compared to the other races, except for Madera County; Hispanics exceeded the Whites by a difference of 7.1 per 100,000.

Objective 15-15a: Reduce Deaths Caused by Motor Vehicle Crashes to 9.2 Deaths per 100,000 Population.

Unintentional injuries, including motor vehicle accidents, were the fifth leading cause of death nationally in 2006 with a rate of 40.6 deaths per 100,000 persons. Nationally, the death rate from motor vehicle accidents alone was 15.1 deaths per 100,000 persons in 2006 (CDC, National Center for Health Statistics, 2009). If motor vehicle deaths were rated separately and not subsumed in the broader rankable category of accidents, motor vehicle deaths would have been the ninth leading cause of death in the United States in 2002 (Anderson & Smith, 2005). In the year 2006 alone, 2,067 child passengers aged 0 to 14 years died in motor vehicle crashes. Of these children, 2,335 (24%) were killed in crashes involving drinking and driving, and 68% of the deaths occurred while the child was riding with a driver that was drinking (Shults, 2004).

Death from all types of accidents was the leading cause of death for individuals, ages 1-39, in the SJV. Accidents involving motor vehicles accounted for the highest proportion of those deaths (California Department of Health Services, 2009). Averaged yearly data from 2005-2007 showed that the death rate per 100,000 persons as a result of motor vehicle accidents was 19.9 for all age groups in the SJV. In California, the death rate from motor vehicle accidents, per 100,000 persons, was nearly half the valley rate at 11.1. As shown in Table 5, using averaged 2005-2007 data, the rates of deaths from motor vehicle accidents in all eight of the SJV counties exceeded the California rate of 11.1 per 100,000 persons and were over twice the rate specified in the HP 2010 objective (California Department of Health Services, 2009). A recent study showed that rural Latino residents were at greater risk for motor vehicle accidents than urban Latinos and explained the differences by more Latinos living and driving in more risky rural areas (Bengiamin et al., 2009).

Objective 15-32: Reduce Homicide Rate to 3.0 per 100,000 Persons.

In 2006, homicides were ranked as the 15th leading cause of death in the United States at 6.2 deaths per 100,000 persons. The highest national rate occurred in the 15-24 age groups at 13.5 deaths per 100,000 persons. The death rate in the United States from homicide was almost four times higher for males, at 10.0 deaths per 100,000 persons, than females, at 2.5 deaths per 100,000 persons (Heron, et al., 2009).

The 2006 death rate due to homicide in California was 6.6 per 100,000 persons (California Department of Health Services, 2009). As with the national data, the highest rate occurred in the 15-24 age groups at 13.5 deaths per 100,000 persons. In the same year, California males in the 15-24 age groups had a death rate from homicides that was almost 10 times higher than the rate for females, at 30.09 and 3.4 respectively. The highest death rate from homicide in California occurred among Black males in the 15-24 age groups at 128.0 per 100,000 persons (California Department of Health Services, Center for Health Statistics, 2007).

In 2009, 13 California counties with a population of 100,000 or greater exceeded the statewide homicide rate of 5.1 per 100,000 persons. Two counties, one of which is in the SJV (Merced), had a homicide rate of 10 per 100,000 and 11 counties, five of which are in the SJV (Fresno, Kern, San Joaquin, Stanislaus, and Tulare), had homicide rates between 5 and 9.9 per 100,000. As shown in Table 5, all of the eight valley counties exceeded the HP 2010 objective of 3 per 100,000 persons.

 Table 5: Death Rate from Motor Vehicle Accidents and Homicide in the San Joaquin Valley and

 California, 2006

County	# of Deaths from Motor Vehicle Crashes	Rate of MVD ¹ per 100,000	# of Deaths from Homicide	Rate of Homicides per 100, 000
Fresno	163.3	18.1	75.3	7.8
Kern	157	20	64.3	7.1
Kings	29.7	20.6	5.3	4.3
Madera	33	22.7	8	6.0
Merced	51	21.1	19.7	7.8
San Joaquin	94	14.6	40	9.1
Stanislaus	86	17.5	27.3	6.1
Tulare	106.7	24.6	45	6.5
San Joaquin Valley	720.7	19.9	284.9	7.32
California	4146.7	11.1	2493.3	6.6
HP 2010 Objective		9.2		3

Source: California Department of Health Services, 2006.

1 = MVD = Motor Vehicle Deaths

Environmental Quality

Objective 8-1a: Reduce the Proportion of Persons Exposed to Air that Does Not Meet the U.S. Environmental Protection Agency's Health-Based Standards for Ozone to Zero Percent.

Air pollution is a major environment-related health threat to children and a risk factor for both acute and chronic respiratory disease in adults. The American Lung Association's publications, State of the Air 2007 and State of the Air 2010, examined the two most pervasive air pollutants: ozone and PM or particle pollution. While these are not the only outdoor air pollutants, they are among the most dangerous because of their toxicity and their prevalence. Even with the downturn in ozone levels, more than half of the people living in the United States (58%) live in 445 counties with unhealthful levels of ozone pollution (American Lung Association, 2010). To make the Air Quality Index (AQI) as easy to understand as possible, the Environmental Protection Agency (EPA) has divided the AQI scale into the six categories shown in Table 6.

In 2008, ozone levels in the SJV exceeded the federal eight-hour ozone standard on 150 days, an increase from 109 days in 2001, and the state one-hour standard of 95 days, a decrease from 123 days

in 2001. The valley eight-hour ozone standard is higher than the national eight-hour ozone standard of 127. The federal one-hour standard was revoked in 2005 (California Air Resources Board, 2006-2008). Furthermore, the number of unhealthy air days increased in six of the eight valley counties between 2006 and 2007 (Table 7: American Lung Association, 2007; 2009). Table 7 indicates that the region is suffering from a chronic ozone problem with all eight valley counties receiving an air quality grade of F from the EPA in 2006-2008. Though Madera and San Joaquin counties had lower numbers of high ozone days, 42 and 44, respectively, they still received an air quality grade of F from the EPA. The SJV not only does not meet the objective set by HP 2010, it also has some of the worst air quality in the nation. Furthermore, current control measures have not been successful enough to improve its relative standing, with California having nine of the 10 most polluted counties in the nation in 2008. Of these eight counties, four are in the valley, as shown in Table 8 (American Lung Association, 2010).

Striking geographic disparities in asthma hospitalization rates exist in the SJV (Map 4). Areas of central Fresno, central and northeastern Kern, and Stanislaus have substantially higher rates of asthma hospitalization when compared to the remainder of the SJV.

Air Quality Index Values	Levels of Health Concern	Colors	
When the AQI is in this range: Air quality condit		As symbolized by this color:	
0 to 50	Good	Green	
51 to 100	Moderate	Yellow	
101 to 150	Unhealthy for Sensitive Groups	Orange	
151 to 200	Unhealthy	Red	
201 to 300	Very Unhealthy	Purple	
301 to 500	Hazardous	Maroon	

Table 6: Air Quality Index Scale

Source: American Lung Association, 2009

Table 7: Number of High Ozone Days per Year by County, San Joaquin Valley, 2006 and 2008

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2008

County	# of Orange Days Unhealthy for Sensitive Groups	# of Red Days Unhealthy	# of Purple Days Very Unhealthy	Total High Ozone Days	# of Orange Days Unhealthy for Sensitive Groups	# of Red Days Unhealthy	# of Purple Days Very Unhealthy	Total High Ozone Days
Fresno	179	32	3	214	152	24	0	176
Kern	242	66	2	310	221	71	2	294
Kings	50	1	0	51	93	3	0	96
Madera	31	1	0	32	24	0	0	24
Merced	116	8	1	125	65	1	0	66
San Joaquin	6	0	0	6	26	3	0	29
Stanislaus	46	1	0	47	45	2	0	47
Tulare	238	25	0	263	239	43	0	282
San Joaquin Valley	114	17	1	132	108	18	0	127
California	1907	409	54	2370	2839	652	53	3544

Source: American Lung Association, 2007; 2009

County	National Rank	# of Orange Days Unhealthy for Sensitive People	# of Red Days Unhealthy	# of Purple Days Very Unhealthy	Grade
San Bernardino, CA	1	227	107	19	F
Riverside, CA	2	242	87	13	F
Kern, CA	3	228	74	4	F
Tulare, CA	4	253	49	2	F
Los Angeles, CA	5	169	60	9	F
Fresno, CA	6	148	31	2	F
El Dorado, CA	7	104	26	1	F
Nevada, CA	8	122	12	0	F
Sacramento, CA	9	92	24	3	F
Kings, CA	10	103	10	1	F

Table 8: Top 10 Most Ozone Polluted Counties in the Nation, 2006 and 2008

Source: American Lung Association, 2010

Note: Unhealthy days are based on 2006-2008 ranges.



Map 6- Asthma Hospitalization rates by ZIP Code, San Joaquin Valley, 2000 - 2007

Note: Asthma hospitalization rates are age adjusted to the 2000 U.S. Census Population

Objective 27-10: Reduce the Proportion of Nonsmokers Exposed to Environmental Tobacco Smoke to 45% of the Population.

Research summarized in the WHO, Tobacco Free Initiative clearly shows that chronic exposure to environmental tobacco smoke, also known as passive smoking, increases health risks and premature deaths in non-smokers. There is clear scientific evidence of an increased risk of lung cancer in non-smokers exposed to second-hand smoke (U.S. Department of Health and Human Services, 2006). This increased risk is estimated at 20% in women and 30% in men who live with a smoker (Hackshaw, Law, & Wall, 1997). Similarly, it has been shown that non-smokers exposed to second-hand smoke in the workplace have a 16% to 19% increased risk of developing lung cancer (Fontham et al., 1994). The risk of getting lung cancer increases with the degree of exposure.

The California Environmental Protection Agency estimates that second-hand smoke causes the death of 3,000 non-smoking Californians each year due to lung cancer (CalEPA, 1997). Results of a state study conducted in 1997 to identify the percentage of children and adolescents exposed to second-hand smoke showed that 12.3% of children were exposed to second-hand smoke in California homes (Cook et al., 1997). There was no data available specific to the SJV on adults exposed to second hand smoke.

Figure 8 shows results from the County and Statewide Archive of Tobacco Statistics (C-STATS, California Department of Health Services, 2009) regarding youth exposures to second-hand smoke. Using living with a smoker and being in the same room with a smoker as surrogate variables for exposure to environmental tobacco smoke, California and the SJV counties were close to meeting the HP 2010 objective of 45% of the population exposed to second-hand smoke.



Figure 8: Percent of youth who were in the same room with someone who was smoking cigarettes on one or more of the previous 7 days, 2008

Source: C-STATS, California Department of Health Services, 2009

Objective 14-24a: Increase to 80% the Proportion of Children Ages 19-35 Months Who Received the Recommended Vaccines (4DTaP, 3polio, 1MMR, 3 Hib, 3 Hepatitis B).

Immunization is one of the greatest public health achievements of modern times. In the U.S. today, 10 childhood diseases can be prevented by immunization – poliomyelitis, measles, pertussis (whooping cough), mumps, rubella (German measles), tetanus, diphtheria, hepatitis B, Haemophilus influenzae type b (Hib), and varicella (chicken pox). Except for tetanus, these diseases are contagious, and when children are not protected against them, serious outbreaks of disease can occur (Children's Health System, 2001). Any shortfalls in immunization leave many of the youngest children vulnerable to diseases that are entirely preventable through vaccination. Immunizations also help control the spread of other infections, such as influenza, within communities. Despite this success, new challenges and reduced resources are weakening the nation's immunization system, increasing the likelihood of disease outbreaks (IOM, 2000).

The Centers for Disease Control and Prevention recommends that children in the United States should receive a 4:3:1 series of immunizations before age 2. Results from the Kindergarten Retrospective Survey (California Department of Health Services, Immunization Branch, 2010) indicate that immunization rate among California's children at 24 months of age was less than the nation's children immunization rate, 76.7% and 79.0% respectively. The SJV had the lowest percentage of children who were immunized than all other regions in California; regional coverage for the 4:3:1



series of immunization for the Central Valley was 66.2%. Rural Northern California had the second lowest percentage of immunizations for the 4:3:1 series at 70.9%. The only region that slightly exceeded the national rate was the San Francisco Bay Area (82.2%) which, included the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma.

California coverage for Polio, MMR, and Hep B remained stable at an average of 91.4%, while immunizations for DTP and varicella were 79.4% and 87.2% respectively. Among California children, Asian kindergarten students had the highest coverage for the 4:3:1 series at 79.2%, Hispanic children at 77.3%, White children 75.6%, and Blacks at 66.0% (California Department of Health Services, Immunization Branch, 2008). Among kindergarteners, it was reported that at 24 months of age 74.1% had been immunized with the 4:3:1:3 series (4 DTP, 3 Polio, 1 MMR, and 3 Hep B) and 70.2% had been immunized with the 4:3:1:3:1 series (4 DTP, 3 Polio, 1 MMR, 3 Hep B, and 1 Var) (California Department of Health Services, Immunization Branch, 2008). In summary, the SJV counties are worse than California, which is not meeting the national objective.

Objective 14-24b: Increase to 80% the Proportion of Adolescents Ages 13 to 15 Years Who Received the Recommended Vaccines.

While data specific to this age group, adolescents ages 13-15, was not available for the SJV, the California Department of Health Services, Immunization Branch conducted yearly school assessments to monitor compliance with California School Immunization Law. One group that is assessed is 7th graders; this assessment has been conducted each year since 1999. In 2008, 95.3% of 7th graders in California had received all required immunizations, an increase from 70.7% in 2001. The 2006 California percentage was similar to the counties in the SJV that ranged from a high of 87.6% in Fresno County to a low of 70.8% in Tulare County. Half of the eight valley counties met the 80% goal set forth in HP 2010 (California Department of Health Services, Immunization Branch, 2003).

Objective 14-29a: Increase to 90% the Proportion of Non-Institutionalized Adults Who Are Vaccinated Annually Against Influenza and Those Ever Vaccinated Against Pneumococcal Disease.

The 2009 CHIS, showed 65.3% of California's seniors, ages 65 years and over, reported having had a flu shot during the 12 months prior to the survey, while only 61.6% of the SJV population in the same group reported having a flu shot. This was slightly lower than the median percentage for the nation at 67.0%. The 2009 CHIS data by gender showed that a larger percentage of females, age 65 and over, in California (63.6%) received flu vaccinations during the 12 months prior to the survey than males in the SJV (60.7%). However, California females, age 65 and over, had higher percentage (66.0%) compared to SJV females (63.6%). Both males and females, age 65 and over, in the SJV and California as a whole, showed some increase between 2007 and 2009 in the percentage who received a flu shot (UCLA Center for Health Policy Research, 2005; 2007). Figure 9 indicates that neither California nor the SJV met the HP 2010 objective of 90% for annual flu vaccinations.

Figure 10 shows great disparity by race/ethnicity for seniors age 65 and over in vaccination against the flu in the SJV ranging from a high of 73.65% for Latinos to a low of 49.5% for African Americans (UCLA Center for Health Policy Research, 2009).

In 2009, 65.8% of California's adult population age 65 and over reported that they have had a pneumonia shot, while 62.3% of the SJV population in the same age group reported that they have had a pneumonia shot (UCLA Center for Health Policy Research, 2009). This was lower than the national percentage of 67.0% (CDC, 2009). The valley, California, and the nation were all below the HP 2010 objective of 90%.



Figure 9: Adults, Ages 65 and Over, Who Had Flu Shot in Past 12 Months, 2007 and 2009

Source: UCLA Center for Health Policy Research (2009)



Figure 10: Adults, Age 65 and Over, Who Had a Flu Shot in the Past 12 Months by Race, 2009

Source: UCLA Center for Health Policy Research, 2009

Access to Care

Objective 1-1: Increase to 100% the Proportion of Persons with Health Insurance.

A 2009 factsheet released by the UCLA Center for Health Policy Research shows that the rates for the uninsured in California increased on average by 5% from 2007 data. Further, the data show that all eight of the SJV counties have higher rates of uninsured than the statewide average of 19.5% with Madera County reporting the highest at 28.6% (CHIS, 2009). Several demographic characteristics, such as age, race/ethnicity, nativity, educational attainment and poverty, contribute to the lack of insurance coverage among Americans. The U.S. Census Bureau reported on selected characteristics of people who were without health insurance for the entire year in 2009. For example, the proportion of uninsured adults (ages 19-64) is more than twice as high as the uninsured rate for children. Nearly 9 in 10 of the uninsured are in working families, with 87.1% working full time in 2007 (ER Brown, R Kronick, NA Ponce, J Kincheloe, SA Lavarreda, EC Peckham, 2009).

Health insurance coverage reflects the nation's social and economic disparities by race and ethnicity Among nonelderly whites, 12.4% were uninsured for all or some of the year in 2007, the lowest uninsured rate among race/ethnic groups, changing little since 2001. Two-thirds of nonelderly whites (68.1%) were covered by Employment Based Insurance (EBI) throughout the year, the highest rate among race/ethnic groups. Only a little more than 6% were enrolled in Medi-Cal or Healthy Families, while about 8% of nonelderly whites had privately purchased health insurance. African Americans had a higher rate of uninsurance than whites (17.2% in 2007); that rate has been relatively unchanged since 2003 but remains well above their uninsured rate of 14% in 2001. African Americans' increased rate of uninsurance was attributable to a loss of EBI since 2001 (down to 48.6% in 2007) without a significant increase in Medi-Cal or Healthy Families coverage above the level of 1 in 4 in 2001. The ethnic group with the highest uninsured rate is Latinos, 28.6% of whom were uninsured in 2007, though this reflects a downward trend since 2001. This improvement in coverage was the product of a slight uptick in EBI coverage—from a low of 38.4% in 2001 to 40.8% in 2007—while enrollment in Medi-Cal and the Healthy Families program remained fairly constant at approximately 1 in 4 nonelderly Latinos (ER Brown, R Kronick, NA Ponce, J Kincheloe, SA Lavarreda, EC Peckham, 2009).

As shown in Figure 11, the poverty level of valley residents impacted insurance status with 30.2% of nonelderly adults with incomes 0-99% of the FPL in 2009 reporting no health insurance for the entire year. Only 5.1% of nonelderly adults with incomes of 300% FPL and above reported having no health insurance in the same year.



Figure 11: Nonelderly Adults, Ages 18-64, in the San Joaquin Valley and California, Without Health Insurance for the Entire Year by Percentage of Federal Poverty Level, 2009

Source: Percentage of Federal Poverty Level, 2009

There was a notable decrease between 2007 and 2009 in the percentages of nonelderly adults who reported having no health insurance for an entire year. Figure 12 indicates that percentages went down dramatically for San Joaquin and Stanislaus residents (UCLA Center for Health Policy Research, 2007; 2009). Neither the valley counties nor the state were near the HP 2010 objective of 100% of people with health insurance.



Figure 12: Nonelderly Adults, Ages 18-64, in the San Joaquin Valley without Health Insurance for the Entire Year, 2007 and 2009

Source: UCLA Center for Health Policy Research, 2007; 2009

Due to the last two years' sharp increases in local unemployment and corresponding drops in both household income and job-based coverage, the number of Californians without health insurance grew in all counties for nonelderly population (ages 0-64) for all or part of 2009 (UCLA Center for Health Policy Research, 2010). All eight counties of the valley had uninsured rates above the statewide average of 24.3% (Table 9). Madera County had the largest total number of uninsured residents, with 32% nonelderly adults and children uninsured all or part of the year. The rate of job-based coverage in Madera County was relatively low, at 34.4%; these figures reflect the cost of some of the lowest unemployment rates in the state.

State/ County	Job based coverage All year	Medi-Cal Healthy Families All year	Other Coverage All Year*	Uninsured All or part year	Total Population
California	50.1	16.3	9.3	24.3	34,387,000
Fresno	43.2	27.6	4.8	24.4	875,000
Kern	38.8	24.4	7.5	29.3	780,000
SJ	44.9	18.1	8.9	28.2	652,000
Stanislaus	43.7	19.8	7.7	28.7	494,000
Tulare	33.0	32.4	9.0	25.6	414,000
Merced	32.0	30.7	5.7	31.6	244,000
Kings	40.9	23.4	7.5	28.3	149,000
Madera	34.4	27.5	6.1	32.0	140,000

Table 9: Insurance Status and Type during the Past 12 Months by Region and County,Ages 0-64, California, 2009

Source: UCLA Center for Health Policy Research, 2010

Objective 1-4a: Increase to 96% the Proportion of Persons (All Ages) Who Have a Specific Source of Ongoing Care.

Growing evidence suggests that the combination of health insurance and having a usual source of care had additive effects for quality of health care (Robert Graham Center, 2004). In 2005, 89.6% of Californians of all ages reported having a usual source of care. This was higher than the percentage for 2001 at 87.6% and lower than the percentage of 2007 at 85.8%. The percentage of SJV residents who reported having a usual source of care was similar to the state with 87.3% in 2001 and 89.9% in 2005 and this number dropped to a low of 84% in 2007. These percentages were similar to the nation where 88.0% of residents in 2001 and 87.9% in 2003 that reported having a usual source of care (CDC, 2005). The percentage of individuals who reported having a usual source of care in both 2001, 2005, and 2007 was higher among valley females at 90.0% in 2001, 90.7% in 2005, and 87.6% in 2007 than it was for males at 84.6% in 2001, 89.1% in 2005, and 80.4% in 2007 (UCLA Center for Health Policy Research, 2003; 2007; 2009).

Figure 13 provides evidence that children age 0-11 in both California and the SJV met the HP 2010 objective and elders, age 65 and over, are slightly lower than the HP 2010 objective of 96% of persons having a usual source of care. However, adolescents, ages 12-17, and nonelderly adults, ages 18-64, did not meet the objective.

As with health insurance coverage, demographic characteristics played a significant role with regard to having a usual source of care for SJV residents. Several demographic characteristics, such as age, race/ ethnicity, citizenship, nativity and educational attainment, contributed to the lack of usual source of care for valley residents (UCLA Center for Health Policy Research, 2009).

- Adults, ages 18-24, were less likely than other age groups to have usual source of care with 34.5% (164,000 persons) in 2009.
- Among ethnic groups, a higher percentage of nonelderly Latino adults, ages 18-64, (30.7% in 2009) reported having no usual source of care than any other racial or ethnic group.
- The proportion of the non-citizen population, in the 18-64 age group, without a usual source of care (38.6% in 2009) was more than double that of U.S.-born citizens in the same age group (17.5% in 2009).
- Educational attainment had an impact on the proportion of people who were without a usual source of care. Higher percentages of nonelderly valley residents with a high school education or less reported having no usual source of care (35.5% in 2009). However, less than half as many persons with some college, vocational school, a college education, some graduate school through a Ph.D. or equivalent, reported having no usual source of care (17.5%, 13.5, and 5.3% in 2009).

100.0% 97.3% 97.4% HP 2010 Objective - 96% 95.0% 92.6% 80.0% ស្ល 82.1 82.5% 8 77.8% 60.0% 40.0% 20.0% 0.0% Child (0-11) Adolescent Adult (18-64) (12-17)Senior (65+) San Joaquin Valley California

Figure 13: Percent Residents in the San Joaquin Valley and California with a Usual Source of Care, by Age Group, 2009

Source: UCLA Center for Health Policy Research, 2005, 2007

One potential explanation for valley residents not meeting the HP 2010 objective of 96% of residents having a usual source of care is a relative shortage of health care professionals in the valley. Figure 14 shows the rate of physicians and surgeons per 1,000 persons in the SJV counties compared to California as a whole. The data show that each of the SJV counties had a lower rate of physicians per 1,000 persons than the state. The data also show that there has been little or no increase in the number of physicians in any of the valley counties between 2000 and 2009 (RAND California, 2009).

The shortage of health care providers in the SJV is impacted by several factors: its largely rural nature, the large percentage of uninsured residents, and lower Medi-Cal reimbursement rates compared to other parts of the state (Capitman, et al., 2005a). National studies confirm this observation, citing that low health insurance coverage rates and low reimbursement rates from programs such as Medicaid may be among the determinants that cause a growing number of health care professionals to either not practice in rural communities or limit their indigent care efforts (Phillips & Kruse, 1995). The National Health Service Corps, a federal agency that works to get health care professionals into shortage areas, reports that 43 million Americans live in communities without doctors or other medical practitioners to deliver primary health care (AFSCME, 2001). Health care workforce shortages in the rural United States are not limited to physicians and nurses but extend to include pharmacists, technology specialists, therapists and many other health care occupations (Braden et al., 1994). There were no current 2007 data available specific to the SJV.

HEALTHY PEOPLE 2010: A 2010 Profile of Health Status in the San Joaquin Valley



Figure 14: Physicians and Surgeons, per 1,000, in the San Joaquin Valley and California, 2000 and 2009

Source: RAND California, 2009

Objective 16-6a: Increase to 90% the Proportion of Women Who Receive Prenatal Care Beginning in First Trimester of Pregnancy.

Infant mortality and its leading cause, low birth weight, are serious public health problems in the United States. Research has shown that women who receive adequate prenatal care during their pregnancies have much lower rates of low birth weight infants than do women who received less than adequate prenatal care (IOM, 1985). Inadequate prenatal care has been identified as a significant risk factor for women whose infants die during the neonatal period from birth to 28 days (March of Dimes, n.d.).

Capitman et al. (2005) report showed 78.1% of SJV women received early (first trimester) prenatal care (Capitman, et al., 2005b). This was similar to the 2004 data at 78.5%. The percentage of valley women who received early prenatal care varied slightly when compared by race and ethnicity. The percentage of minority women receiving inadequate care has consistently remained higher than the percentage of White women receiving inadequate care from 2002 to 2004. Specifically, African American and Asian/ Pacific Islander women had an increased inadequacy of prenatal care (over 5 to 7 percentage points). Hispanic women had an improvement of 3.3 percentage points, while White and American Indian women had a slight but significant increase in inadequacy of care. Despite these reductions in the extent of racial/ethnic disparities, White women continue to remain at lower risk for inadequate care. Early prenatal care also varied by mother's age and educational level, with those of younger ages and those having less education experiencing lower percentages of first trimester care. Furthermore, the percentage of valley women who received adequate prenatal care varied by county (Capitman, et al., 2005b). Table 10 summarizes the differences in inadequacy of prenatal care by race, education level, and place of residence. Averaged 2000-2002 data showed that none of the SJV counties met the HP 2010 objective of 90% of pregnant women receiving early prenatal care nor did they meet the California average of 85.5% (California Department of Health Services, 2004).

In 2007, about 1 in 28 infants (3.6% of live births) was born to a woman receiving late or no prenatal care in California. During 2004-2006 (average), Native American mothers (7.0%) had the highest rates of late or no prenatal care compared to other maternal race and ethnicity categories. The rate of late or no prenatal care among births to Native American women (7.0%) was about two times higher than the rate among white women (2.0%).

Native American mothers had the highest rates of late or no prenatal care (8.1%) in Tulare County during 2004-2006 (average) compared to other maternal race and ethnicity categories followed by Kern (6.6%), Stanislaus (6.5%), and Fresno County (4.0%). In San Joaquin County, Black mothers had the highest rates of late or no prenatal care (10.7%) during 2004-2006 (average) compared to other maternal race and ethnicity categories (National Center for Health Statistics, Final Natality Data, 2011).



Table 10: Distribution of demographic characteristics by late initiation and non-adherence.California Birth Master File 2002-2004

	Total N= 142,297		Total N= 104,526	
	% Late Initiation	% of total	% Non- Adherence	% of total
Race/Ethnicity/Nativity ***				
White	12.2	27.8	42.0	26.6
Black	22.0	4.1	50.3	3.9
American Indian	18.2	.7	48.1	.7
Latino- U.S. born	19.4	28.8	46.9	28.7
Latino- Mexican born	21.6	30.6	50.4	31.7
Asian/Pacific Islander- U.S. born	26.8	1.7	54.4	1.8
Asian/Pacific Islander- non-U.S.				
born	22.7	5.1	54.5	5.5
Other non-U.S. born	17.5	1.3	47.3	1.2
Payment Source for Care ***				
Medi-Cal	23.1	55.7	50.2	54.9
Other Public	58.4	.9	51.7	.5
Private	12.0	44.4	44.0	44.7
Father's education***				
Less than HS	23.1	65.4	50.7	35.7
HS or more	14.1	34.6	44.0	64.3
Mother's education				
Less than HS	16.1	25.7	52.5	26.7
HS or more	25.3	74.3	45.5	73.3
Residence***				
Urban	18.1%	73.9	47.5 (ns)	73.6
Rural	19.5%	26.1	47.1 (ns)	26.4
Mother's Age ***				
Non-Adolescent	17.0	86.3	46.5	85.9
Adolescent	28.1	13.7	53.0	14.1

Source: California Department of Health Services, 2004

*** Significant at the .005 level

CONCLUSION

Key Findings

The goal of this report was to assess the progress SJV residents have made in reaching the HP 2010 objectives for the 10 leading health indicators since the 2007 Profile (Bengiamin, et al., 2008). Additionally, we attempted to compare the valley to California and the nation, whenever possible. Limitations on available data for comparison purposes remained to be our greatest barrier to meeting these goals. Further confirmation to the data limitation was also voiced by the Central California Public Health Partnership during their review of the final report. The major issues with data collection involved the following:

- Key indicators were measured inconsistently across sources.
- Age groups were clustered differently.
- Data was collected from different years.
- Units of measurement from different sources were not the same.
- Data specific to the SJV did not exist or was not available for several objectives.

In reviewing the findings from this report, the region's Departments of Public Health were concerned with limitations in the accuracy, stability, and representativeness of health indicators derived from the CHIS and the absence of county-specific individual level data to assess the determinants of withincounty and regional variations in health.

Despite these difficulties we were able to determine that overall there is little evidence to suggest that progress has been made since the 2007 Profile, comparing 2001 data to 2007 data, on meeting the HP 2010 objectives. Specifically, data show that the SJV has not yet met all of the 22 objectives set forth in the 10 leading health indicators from HP 2010 (Table 11). The valley met or exceeded the standard set in three of the objectives and did not meet the standard in 19 other objectives. The following is a summary of the findings regarding the status of the SJV with regard to meeting the HP 2010 objectives.

- 1. Physical Activity
 - Increase to 30% the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
 - Increase to 85% the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness three or more days per week for 20 or more minutes per occasion.

In the 2009 report the percentages of physical activity among adults in the SJV, the state, and the nation were worse than the 2007 report. In this report the SJV adult physical activity was worse than California and the nation and exceeded the HP 2010 objective of 30% of adults engaging in regular, moderate physical activity. Although the percentage of SJV adolescents who engaged in vigorous physical activity was comparable to that of the state and the nation, they did not meet the HP 2010 objective of 85%.

2. Overweight and Obesity

- Reduce the proportion of adults who are obese to 15% of the population.
- Reduce the proportion of children and adolescents who are overweight or obese to 5% of the population.

The SJV had a higher percentage of overweight/obese nonelderly adults, ages 18-64, and seniors, age 65 and over, than the state as a whole.

The percentage of overweight and obese nonelderly adults remained stable since the 2007 Profile. Percentages of overweight and obese adults and seniors as compared to the nation as a whole were similar. The SJV and the state failed to meet the HP 2010 objective of reducing the proportion of adults who were overweight or obese to 15% of the population.

The percentage of overweight and obese adolescents in the SJV increased between 2001 and 2007. The percentage of valley adolescents who were overweight or obese was higher than the state and similar to the nation. The valley failed to meet the HP 2010 objective of reducing the proportion of children and adolescents who are overweight or obese to 5% of the population.

3. Tobacco Use

- Reduce cigarette smoking by adults to 12% of the population.
- Reduce cigarette smoking by adolescents to 16% of the population.

There was some improvement in the percentage of adult smokers between 2001 and 2007 in the SJV. When comparing the valley to the state, a higher percentage of valley adults reported being current smokers than adults statewide. However, a lower percentage of valley adults reported being current smokers than did adults nationally. Adults in the valley, the state, and the nation failed to meet the HP 2010 objective of reducing cigarette smoking by adults to 12% of the population.

A lower percentage of adolescents in the SJV and California reported being smokers than the nation and surpassed the HP 2010 objective of reducing cigarette smoking by adolescents to 16% of the population. Current data shows the SJV having a lower percentage of adolescent smokers than in 2007 Profile.

4. Substance Abuse

- Increase to 89% the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days.
- Reduce the proportion of adults using any illicit drugs in the past 30 days to 2% of the population.
- Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month to 6% of the population.

The percentage of adolescents in both the SJV and California who reported not using alcohol failed to meet the HP 2010 objective of 89% of adolescents not using alcohol. The 2007 data show that the percentage of underage persons, ages 12-20, who reported binge drinking was higher than the nation but lower than the state. Data from this report indicates that SJV adolescents are reporting similar percentages compared to the state and the nation on alcohol consumption. However, the SJV is not progressing well since the 2007 report.

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The percentage of adults in the SJV who reported binge drinking had increased to about five times the percentage in 2001. SJV percentage of adults reporting binge drinking (29.8%) was comparable to the percentage statewide at 29.7%. Both the Valley and California had similar percentages (41.6% and 45.5%) of binge drinkers in the 18-25 age groups than the nation (42.1%). The SJV, California, and the nation failed to meet the HP 2010 objective of reducing the percentage of adults who engage in binge drinking to 6% of the population. Data shows similar progress in the SJV adult residents' use of illicit drugs since the 2007 Profile.

- 5. Responsible Sexual Behavior
 - Increase to 50% the proportion of sexually active persons who use condoms.
 - Increase to 95% the proportion of adolescents who abstain from sexual intercourse or use condoms, if currently sexually active.

Data specific to condom use among adults in the SJV was not available to measure against the HP 2010 goal of 50% of sexually active adults using condoms. As a surrogate indicator we examined the rate of chlamydia and gonorrhea cases in the SJV, which increased between 2001 and 2005, and were higher than the state as a whole for those between the ages 15-24.

The percentage of SJV adolescents who abstained from sexual intercourse was comparable to the adolescents statewide (72.0% and 74.8% respectively) and better than the national percentage at 52.2%. However, in 2007, a small percentage of SJV male teens(7.1%), ages 15-17, reported not using a condom during sexual intercourse. Overall, the percentage of sexually active SJV male adolescents who reported using a condom (92.9%) was slightly lower than the state (94.5%). The SJV, the state, and the nation came close to meeting the HP 2010 objective of increasing to 95% the proportion of adolescents who either abstain from sexual intercourse or use condoms during sexual intercourse.

6. Mental Health

• Increase to 50% the proportion of adults with recognized depression who receive treatment.

The percentage of SJV adults who suffered from depression and sought help was lower than the state (5.6% and 8.3% respectively). The valley, the state, and the nation failed to meet the HP 2010 objective of increasing to 50% the proportion of adults with recognized depression who receive treatment. County and region-specific estimates from the 2005 CHIS regarding treatment of depression shows similar percentage to the 2005 Profile. However, it is important to note that the percentage of deaths from suicide was higher than that of the state in three out of the eight counties and all counties except one (Madera) were higher than the HP 2010 objective of 5.0 deaths per 100,000 persons. Furthermore, there was an increase in the percentage of suicide deaths from 2001 to 2004 in six of the eight counties. There was no data available for 2007 specific to the SJV; therefore 2005 data is used to report Central Valley status.

7. Injury and Violence

- Reduce deaths caused by motor vehicle crashes to 9.2 per 100,000 persons.
- Reduce homicides to 3.0 per 100,000 persons.

The rates of death from motor vehicle crashes in almost all eight of the SJV counties was approximately twice that of the state as a whole and the HP 2010 objective of 9.2 deaths per 100,000 persons. SJV county rates for death due to homicide varied widely from a low of 3.6 to a high of 7.9 per 100,000 persons (California Department of Health Services, 2008). Four of the eight counties had homicide rates that were higher than the state. The SJV had similar homicide rates to the nation. Furthermore, the SJV, the state, and the nation still exceeded the HP 2010 objective of 3.0 homicide deaths per 100,000 persons.

8. Environmental Quality

- Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency's health based standards for ozone to 0%.
- Reduce the proportion of nonsmokers exposed to environmental tobacco smoke to 45% of the population.

The SJV remains one of the worst regional areas with some of the worst air quality in the nation. Ozone levels continue to exceed federal one-hour and eight-hour standards. Recent data on smog emissions show the valley leads the nation with the most days of polluted air. Furthermore, in 2010 California had all ten of the most polluted counties in the nation. Of the counties, four were in the SJV. None of the valley counties came close to meeting the HP 2010 objective of 0% exposure to air that does not meet the EPA health-based standards for ozone. In the United States, 21 million or 35% of children live in homes where residents or visitors smoke in the home on a regular basis. About 50% to 75% of children in the United States have detectable levels of cotinine, the breakdown product of nicotine, in their blood (Schuster, Franke, & Pham, 2002).

9. Immunization

- Increase to 80% the proportion of young children who receive all vaccinations that have been recommended for universal administration for at least five years.
- Increase to 80% the proportion of adolescents ages 13 to 15 years who receive the recommended vaccinations.
- Increase to 90% the proportion of non-institutionalized adults who are vaccinated annually against influenza and those ever vaccinated against pneumococcal disease.

The percentage of SJV children receiving recommended vaccines decreased slightly between 2004 at 69.3% and 2007 at 66.2%. The valley percentages remained lower than both the state and nation. The SJV, the state, and the nation failed to meet the HP 2010 objective of 80% of young children receiving all the recommended vaccines. While data specific for adolescents, ages 13-15, were not available, a state assessment of 7th graders showed some variation among the eight counties. On average, SJV results were comparable to that of the state, and half of the eight valley counties met or exceeded the 80% goal set forth in HP 2010.

When compared to the state a slightly lower percentage of valley seniors, age 65 and over (68.9% and 67.0% respectively), received an annual influenza vaccination. The percentage of seniors in the SJV who received a flu shot was lower than the nation at 67.9%. There was a slight decrease in the percentage of seniors receiving a flu shot between 2001 and 2007. The valley, the state, and the nation failed to meet the HP 2010 objective of increasing to 90% the proportion of non-institutionalized adults who are vaccinated annually against influenza. This was also true of adults vaccinated against pneumonia.

10. Access to Care

- Increase to 100% the proportion of persons with health insurance.
- Increase to 96% the proportion of persons who have a specific source of ongoing care.
- Increase to 90% the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy.

The SJV had a higher percentage (23.4%) of uninsured nonelderly adults, ages 18-64, as compared to the state as a whole, and there was little change between 2001 and 2007. Notable age, race/ethnicity, and income disparities in insurance coverage mirrored national patterns. Similar percentages of nonelderly adults in the valley, the state, and the nation reported having a usual source of care. There was no 2007 data on usual source of care specific to the SJV.

In the 2007 report, the SJV had a lower percentage of women receiving adequate, early prenatal care than California. There was an improvement in adequate prenatal care in the SJV from 2002 at 80.8% to 82.3% in 2004. Despite the overall improvement in adequacy, racial ethnic disparity persisted over the same period. In summary, the SJV failed to meet the HP 2010 objective of 100% with insurance coverage, 96% with a specific source of care, and 90% receiving early prenatal care. There was no 2007 data relevant to this health indicator specific for the SJV.

Health Indicator	San Joaquin Valley Compared with California	San Joaquin Valley Compared with the Nation	San Joaquin Valley Compared with Healthy People 2010 Target	Progress Since the 2007 Profile			
Physical Activity							
Adults	Similar	Worse	Met Target	Worse			
Adolescents	Worse	Similar	Did not meet Target	Similar			
Overweight and Obesity							
Adults	Worse	Similar	Did not meet Target	Similar			
Adolescents	Worse	Similar	Did not meet Target	Similar			
Tobacco Use							
Adults	Worse	Better	Did not meet Target	Similar			
Adolescents	Worse	Better	Met Target	Better			
Substance Abuse							
Adults - Binge Drinking	Similar	Similar	Did not meet Target	Worse			
Adults - Illicit Drug Use	Worse	No comparable data	Did not meet Target	Similar			
Adolescents* - Alcohol Use	Similar	Worse	Did not meet Target	Similar			
Sexual Behavior							
Adults - Condom Use	Worse	No comparable data	Did not meet Target	No comparable data			
Adolescent - Abstain/ Condom Use	Comparable	Better	Did not meet Target	Better			
Mental Health							
Adults - Treatment for Depression	Worse	No comparable data	Did not meet Target	No comparable data??			
Injury and Violence							
Motor Vehicle	Worse	Worse	Did not meet Target	Similar			
Homicide	Worse	Worse	Did not meet Target	Similar			
Environmental Quality							
Air Quality	Worse	Worse	Did not meet Target	Better			
Second Hand Smoke	Similar	Similar	Did not meet Target	Better			
Immunization							
Childhood	Worse	Worse	Did not meet Target	Worse			
Adolescents	Worse	No comparable data	Met Target	No comparable data??			
Flu Shots	Similar	Similar	Did not meet Target	Better			
Access to Health Care							
Health Insurance	Worse	Similar	Did not meet Target	Worse			
Source of Care	Similar	Similar	Did not meet Target	No comparable data			
Prenatal Care	Worse	Worse	Did not meet Target	No comparable data			

Table 11; San Joaquin Valley Report Card for Meeting Healthy People 2010 Goals, 2007

*Data on drug use was not available

In moving forward we look to Healthy People 2020 conceptual framework to help understand the determinants of health status and health disparities. Healthy People 2020 vision and mission suggest that population health is determined by a complex interaction of multiple factors including individual behaviors, biological factors, physical and social factors, environmental factors, policies, interventions and access to health care services. Healthy People 2020 also suggests that the development of comprehensive strategies to eliminate health disparities will require close collaboration and linkages with community assets, workforce diversity, economic development, and a more responsive, accessible and efficient health care delivery system.



The recommended overarching goals for Healthy People 2020 continue the tradition of earlier Healthy People initiatives of advocating for improvements in the health of every person in our country. They address the environmental factors that contribute to our collective health and illness by placing particular emphasis on the determinants of health. Health determinants are the range of personal, social, economic, and environmental factors that determine the health status of individuals or populations. They are embedded in our social and physical environments. Social determinants include family, community, income, education, sex, race/ethnicity, geographic location, and access to health care, among others. Determinants in the physical environments include our natural and built environments.

Wrapping up this final report for Healthy People 2010 permits an assessment of the initiatives and efforts delineated in the prior report and addresses unfinished business. Our report shows that regional challenges are as present as ever. The San Joaquin Region still has unacceptable disparities between Whites and minorities in measurements of joblessness, health status, per capita income and poverty rates. The prosperity that the region has enjoyed over the past 10 years is not equally shared by all. The SJV's poor performance on health and well-being indicators reflects broad and unfair differences in health and well-being outcomes across groups and places. Well-known inequalities in social, economic, environmental, and supportive service conditions across valley places are linked to these outcomes. Regional and neighborhood efforts to improve living conditions and health often work in isolation. Their concerns often receive too little attention from powerful community leaders and policy-makers who still view health and well-being in individual terms.

In an effort to shift the focus to the communities and neighborhoods, the Central Valley Health Policy Institute has been involved in a national initiative launched by the Joint Center for Political and Economic Studies, Health Policy Institute. The San Joaquin Valley Place Matters serves as catalysts for strategic action to improve the health of the region. Our mission is to identify, develop, and implement regional strategies to address racial/ethnic, rural/urban social class disparities.

Next Steps- Moving forward the region's goal is to eliminate health disparities and to provide a framework for understanding the magnitude of racial and ethnic disparities in the SJV and the social determinants of these disparities. The Call to Action focuses on initiatives addressing these issues and provides specific action steps in progress proposed by each. The ultimate goal is to reduce service barriers and provide health and human services in a way that ensures that all enjoy good health regardless of race/ ethnicity, disability, or socioeconomic status.



In 2010, The California Endowment (TCE) started a new, 10-year strategic place-based plan to Building Healthy Communities (BHC). The goal is to radically improve the health in 14 underserved, geographically and ethnically diverse communities throughout California. The idea is to take a holistic approach to improve both the community and individual health. The ultimate goal: building communities where children are healthy, safe and ready to learn. The San Joaquin Valley (SJV) is home to three of TCE's 14 Building Healthy Communities (BHC) sites: Central/ Southeast/Southwest Fresno, Southwest Merced/East Merced County, and South Kern.

Community members and other stakeholders were deeply engaged in developing initial phases of long-term plans for meeting the TCE "Four Big Results" and "10 Outcomes" over the next 10 years.

The Central Valley Health Policy Institute (CVHPI), at the Central California Center for Health and Human Services, California State University, Fresno is collaborating with other BHC participants in the region to assess the existing data capacity to measure the baseline and progress of the TCE "Four Big Results". CVHPI has sought to identify data elements to measure and approximate these "Four Big Results" and "10 Outcomes". CVHPI also collaborated with TCE's Office of Research and used data elements that they have been developing where possible. The full report, Building Healthy Communities in the SJV: Preliminary Baseline Data Report is available online at: www.cvhpi.org.



The new Affordable Care Act (ACA) includes changes in the existing public health care programs (Medicaid, Medicare, S-CHIP) and the regulation of private insurance, new efforts to increase access to preventive services and improve management of chronic conditions, new funding for practitioner education and demonstrations of new health care roles and other changes. In October 2010, a bill authorizing the exchange had been signed. Government and provider groups are diligently exploring their roles in implementing the new law.

California is on track to become one of the first states to develop the insurance exchange and insurance regulation changes required by ACA. Despite early efforts to implement ACA by 2014, California's short-term is harder to gauge. Still mired in the recession, the state seems poised for another round of draconian cuts in Medi-Cal and other safety net programs. The recession has had even more dire consequences for the valley, where unemployment and lack of health care access have grown even more than statewide, while county and city budgets for health and human services have been slashed. Valley safety net hospitals face huge losses linked to uncompensated care and inadequate Medi-Cal rates, while other safety net providers are reeling with massive increases in demand. Meanwhile, several valley counties are in the thick of planning or implementing Medi-Cal and indigent care changes, and a new multi-county Medi-Cal managed care program is just getting started. In this context, valley health care

stakeholders focus on maintaining and enhancing our under-funded and over-stretched health system, even while preparing to implement the new law.

In response to patients' and many practitioners questions about ACA, a practicing physician in Central California was presented with an opportunity to collaborate with public health scholars and health care economists at the Central Valley Health Policy Institute at California State University, Fresno to help design a practical national health care that can work for everyone. The team explored the prestigious Institute of Medicine (IOM), National Academy of Sciences four-year project that led to broad principles to the causes and consequence of uninsurance. In updating these principles to current health care system performance and the current political context, the team believes that US policy should seek a health care system that is: 1) Continuous, 2) Affordable, 3) Universal, 4) Sustainable, and 5) Effective (CAUSE).

The CAUSE goals articulate an excellent, equal opportunity health system, where all patients have access to needed health services and can anticipate that necessary preventive and curative services are available in a coordinated way across the life course, and that taxpayers and community members feel secure in knowing that the health system provides the services needed to promote our nation's health while living within our collective means. Using the CAUSE principles, we describe at least six issues that need to be addressed through valley advocacy for state policy choices and local efforts to participate in federally-administered components of ACA. The full report, The Affordable Care Act and California's San Joaquin Valley: A CAUSE Perspective is available online at: www.cvhpi.org.

The Central Valley Healthy Policy Institute at California State University, Fresno facilitated the first of its kind, Place Matters: San Joaquin Valley Regional Equity Forum, bringing together more than 150 regional key stakeholders in an effort to develop a sound regional agenda to improve health inequities. Key leaders in air and water quality, healthy food access, physical activity environments, access to health care, affordable housing and development contributed to this day-long discussion. The forum highlighted how the environments we live in shape our health and determine our years of productive life. During the event, researchers from the Central Valley Health Policy Institute released preliminary findings from a ground-breaking report on years of productive life lost in the region as it relates to one's ZIP code. The full report, Equity in Health and Well-Being Equity in the San Joaquin Valley: A New Approach, is scheduled to be released in fall of 2011 and will be available online at: www.cvhpi.org. The report focuses on available data from 1998-2008.



MAJOR FINDINGS FROM THE REPORT REVEALED

- 1. There were huge differences in the number of years of productive life lost before age 65 based on the different places that people live—The range was 17-74 years lost per 1,000 people. The overall years of potential life lost was higher than California as a whole.
- 2. There were large disparities among avoidable hospitalizations when compared by ZIP code and other indicators such as: neighborhood poverty, segregation, and age. Avoidable hospitalization visits ranged from 48-480 avoidable hospitalizations per 10,000 people.
- 3. Poverty was the main determinant of years of productive life lost (YPLL). The YPLL was at its highest in poorest areas. When controlling for poverty, urban and segregated communities lost more years of potential life.
- 4. Rates of avoidable hospitalizations were higher in poorer and more heavily immigrant communities, but when controlling for poverty, avoidable hospitalizations were lowest in rural, segregated communities. Non-segregated, rural communities had fewer immigrants and much older populations.

A SHARED EQUITY REGIONAL POLICY AGENDA

Data clearly show that life opportunities are unequal and unfair across SJV communities. There are many efforts by regional and neighborhood groups to improve living conditions. Yet, public and private policymaking and systems change efforts have tended to focus on individuals. Thus, still remains a great need to address the cumulative historical and current impacts of valley places on life chances. Because many of the regional and neighborhood efforts to improve living conditions in the region's most impacted communities have often been isolated from each other, the full measure of despair in many valley places is not well-recognized by policymakers.

By collaborating to form a regional policy agenda, sharing information and analyses, and supporting each others' efforts, organizations and groups seeking greater fairness in life chances may have greater impact. This calls for the development of a regional equity agenda and stronger collaboration among the regional and neighborhood groups seeking to improve living conditions in the valley. The report is intended to provide key stakeholders and policy-makers with a comprehensive picture of the health inequity challenges that the SJV faces. It will allow key stakeholders to advocate for improvements in environmental quality, human development and health promotion programs, community and economic development and neighborhood revitalization efforts. SJV Fair Health Movement could bring together and support diverse regional and neighborhood efforts to social determinants of health and improve living conditions across all valley places through a shared regional equity agenda, ongoing collaboration for solution framing, and new partnerships for policy and systems change.

Along with the Social Justice work, the civic engagement approach lies at the heart of the Central Valley Health Policy Institute mission and value system and defines its unique contribution to the future of vulnerable individuals and families in the SJV. Young individuals and their families need opportunities to play an active role in their community and a vibrant nonprofit and philanthropic sector to support the

attainment of the common good. A key component of civic engagement is having a recognizable cadre of emerging leaders of color for engagement in civic affairs. There is a need for regional capacity to aid and support our emerging minority leaders by increasing skills, resources and opportunities, and creating a support mechanism to encourage more successful leadership. For the SJV, effective and successful leadership also requires good knowledge of culturally and linguistically appropriate strategies, which will contribute to the overall quality of life.

The CVHPI's civic engagement approach centers on seeding change, sparking innovation, and bringing together people who might not normally come together to solve a problem.

The valley must work to build the infrastructure that will allow this to happen, because without it, the programs, services, advocacy, speaking out, and positive change that the foundations and funders seek will not materialize. Moving forward, the foundations seek increased efficiency, collaboration and racial equity and inclusion as it continues to invest for a stronger, more effective and responsive nonprofit sector.

In conclusion, public health efforts for 2020 and beyond must continue to stretch beyond traditional health sectors. In doing so we hope to reinvigorate public health leadership that engages nontraditional partners to create healthier choices that are easier for all people to make.

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