San Joaquin County

2010 COMMUNITY HEALTH STATUS REPORT

EXECUTIVE SUMMARY

A description of the health status and mortality experience of San Joaquin County Residents
San Joaquin County Public Health Services is pleased to present an Executive Summary of the San Joaquin County 2010 Community Health Status Report. This Executive Summary examines select health status indicators that address social and demographic characteristics, leading causes of death, chronic diseases, and issues in maternal, child, and adolescent health. A more comprehensive report will be available in May 2010 and will cover additional indicators such as cancer incidence, birth rates, infant mortality, teen births, unintentional injuries, breastfeeding, and communicable diseases. We hope that this executive summary initiates communitywide dialogue about ways to improve the health and well being of the county, and that these efforts are further enhanced once the more comprehensive report becomes available in May 2010.

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Population Demographics

The residents of San Joaquin County (SJC) are racially/ethnically diverse and include Caucasians, Hispanics, African-Americans, Asians, Pacific Islanders and other races and ethnicities. Since 2000, the population of SJC has increased from 570,000 to 690,000.\(^1\) It is estimated that the population of SJC will double between the years 2000 and 2030. By the year 2050, the Hispanic population is expected to be more than twice the White population and the Asian population will roughly equal the White population (Figure 1).

![Figure 1: Race/Ethnicity projections for San Joaquin County, 2000-2050](chart)

Source: California Department of Finance, Population Projections for California and Its Counties 2000-2050.

Income

The median household income in the county increased from $41,282\(^2\) in 2000 to $54,882\(^3\) in 2008. Despite the increase in income, SJC remains poorer than California as a whole where the median household income in 2008 was $61,021. In SJC, more than 40% of Hispanics and African Americans, and more than one-third of Asians live in households with incomes less than $35,000\(^2\) (Figure 2). Additionally, a greater percentage of the SJC population lives below federal poverty levels (FPL) than in California (Figure 3). Children less than 5 years of age living under the FPL is similar in SJC as in California for most races, with the exception of children of Asian descent. In SJC, 22.9% of Asian children under 5 years old live below the FPL compared to 7.9% of California’s under 5 years Asian population.\(^3\)
Figure 2: SJC household income in 2008 by race/ethnicity.

Source: United States Census Bureau, American Community Survey 2008

Figure 3: Percent of SJC and CA residents living in poverty by race/ethnicity, 2008*

*Poverty is defined using Federal Poverty Levels (FPL) set by the Office of Management and Budget (OMB). If an individual or family falls under the FPL, they are considered to be living in poverty. In 2008, the FPL for a family of four was an annual income less than $21,834.

Source: United States Census Bureau, American Community Survey 2008
**Education**

In 2008, 76% of SJC adults had graduated from high school and only 15% of adults had Bachelor’s degrees or higher (Figure 4). In comparison, 30% of adults in CA had Bachelor’s degrees or higher.\(^3\) The number of English as a second language students in grades K-12 was 26,212, or 21% of the total enrollment in the 2001-2002 school year. Limited English speaking residents are primarily Hispanic and Southeast Asian (Cambodian, Hmong, Vietnamese and Laotian). The California Department of Education’s Academic Performance Index (API) of 1999 showed that the majority of public high schools in SJC are ranked in the 5\(^{th}\) through 6\(^{th}\) deciles of all public high schools in the state (the 10\(^{th}\) decile schools are the highest performing schools).\(^4\) With few exceptions, elementary schools in SJC similarly underperformed.

**Figure 4: Educational attainment of adults aged 25+ years in San Joaquin County, 2008**

- High school graduate/GED: 27%
- Associate’s degree: 8%
- Bachelor’s degree: 11%
- Graduate or professional degree: 4%
- No high school diploma: 24%
- Some college, no degree: 26%

Source: United States Census Bureau, American Community Survey 2008

**Health Insurance and Employment**

In San Joaquin County, nearly 16.5% of the population was without any health insurance at some point in 2008. Health insurance rates are linked to employment rates since most people have employment based coverage. The unemployment rate in SJC in January 2010 was estimated at 18.4%, up from 17.0% in December 2009, and above the December 2008 estimate of 14.6 percent. This compares with an unadjusted unemployment rate of 13.2% for California and 10.6% for the nation in January 2010.\(^5\) Given the economic recession, the rates of unemployment and the number of uninsured individuals in SJC will likely increase through 2010.
**Leading Causes of Death**
Chronic diseases account for 70% of all deaths in the U.S., with heart disease, cancer, and stroke alone accounting for more than 50% of all deaths each year⁶. Similarly, in SJC, 54.0% of deaths in 2008 were due to heart disease, cancer and stroke (Table 1).

**Table 1. Ten Leading Causes of Death, San Joaquin County, 2008**

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of Deaths</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>1273</td>
<td>26.8%</td>
</tr>
<tr>
<td>Malignant Neoplasms (Cancer)</td>
<td>1017</td>
<td>21.4%</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>290</td>
<td>6.1%</td>
</tr>
<tr>
<td>Cerebrovascular Disease (e.g. Stroke)</td>
<td>273</td>
<td>5.7%</td>
</tr>
<tr>
<td>Motor Vehicle Accidents</td>
<td>229</td>
<td>4.8%</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>190</td>
<td>4.0%</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>163</td>
<td>3.4%</td>
</tr>
<tr>
<td>Chronic Liver Disease &amp; Cirrhosis</td>
<td>117</td>
<td>2.5%</td>
</tr>
<tr>
<td>Pneumonia &amp; Influenza</td>
<td>93</td>
<td>2.0%</td>
</tr>
<tr>
<td>Suicide</td>
<td>73</td>
<td>1.5%</td>
</tr>
<tr>
<td>All Other Causes</td>
<td>1030</td>
<td>21.7%</td>
</tr>
<tr>
<td><strong>Total Deaths</strong></td>
<td><strong>4748</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
**Deaths by Gender**

Of the ten leading causes of deaths in males and females in SJC, the proportion of deaths due to chronic diseases is extremely high: 83.9% for males and 86.1% for females (Table 2). Heart disease and cancer are the top two leading causes of death for both males and females. Motor vehicle accidents is the 3rd leading cause of death in males but only the 7th leading cause of death in females. Cerebrovascular disease (stroke) ranks as the 3rd leading cause of death in women and 5th leading cause in men. Chronic lower respiratory disease, which includes asthma, ranks fourth for both males and females. Diabetes mellitus is not far behind, ranking sixth among both males and females.

**Table 2. Ten Leading Causes of Death by Gender, San Joaquin County, 2008**

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>Number</td>
<td>Percent</td>
<td>Rank</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Diseases of the Heart</td>
<td>1</td>
<td>639</td>
<td>27.0%</td>
<td>1</td>
<td>636</td>
<td>26.7%</td>
</tr>
<tr>
<td>Malignant Neoplasms (Cancer)</td>
<td>2</td>
<td>497</td>
<td>21.0%</td>
<td>2</td>
<td>520</td>
<td>21.8%</td>
</tr>
<tr>
<td>Motor Vehicle Accidents</td>
<td>3</td>
<td>151</td>
<td>6.4%</td>
<td>7</td>
<td>78</td>
<td>3.3%</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>4</td>
<td>138</td>
<td>5.8%</td>
<td>4</td>
<td>152</td>
<td>6.4%</td>
</tr>
<tr>
<td>Cerebrovascular Diseases (e.g. Stroke)</td>
<td>5</td>
<td>115</td>
<td>4.9%</td>
<td>3</td>
<td>158</td>
<td>6.6%</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>6</td>
<td>94</td>
<td>4.0%</td>
<td>6</td>
<td>96</td>
<td>4.0%</td>
</tr>
<tr>
<td>Chronic Liver Disease &amp; Cirrhosis</td>
<td>7</td>
<td>77</td>
<td>3.3%</td>
<td>9</td>
<td>39</td>
<td>1.6%</td>
</tr>
<tr>
<td>Suicide</td>
<td>8</td>
<td>57</td>
<td>2.4%</td>
<td>10</td>
<td>16</td>
<td>0.7%</td>
</tr>
<tr>
<td>Pneumonia &amp; Influenza</td>
<td>9</td>
<td>48</td>
<td>2.0%</td>
<td>8</td>
<td>45</td>
<td>1.9%</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>10</td>
<td>43</td>
<td>1.8%</td>
<td>5</td>
<td>120</td>
<td>5.0%</td>
</tr>
<tr>
<td>Assault (Homicide)</td>
<td>-</td>
<td>35</td>
<td>1.5%</td>
<td>-</td>
<td>8</td>
<td>0.3%</td>
</tr>
<tr>
<td>Unintentional Injuries*</td>
<td>-</td>
<td>26</td>
<td>1.1%</td>
<td>-</td>
<td>13</td>
<td>0.5%</td>
</tr>
<tr>
<td>Atherosclerosis</td>
<td>-</td>
<td>7</td>
<td>0.3%</td>
<td>-</td>
<td>8</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total Deaths</td>
<td>-</td>
<td>2367</td>
<td>100.0%</td>
<td>-</td>
<td>2381</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Excludes motor vehicle accidents
Deaths by Race
In looking at the leading causes of death for SJC broken out by race/ethnicity, there are distinct differences in the causes of death for the various racial/ethnic groups (Figure 5). Most notably, only 19% of Hispanic deaths in 2008 were due to heart disease, compared to 31% of deaths in the African American population being attributable to heart disease. Hispanics also had a higher percentage of deaths due to motor vehicle accidents (10%) and chronic liver disease and cirrhosis (5%) than the other racial/ethnic groups.

Figure 5. Leading Causes of Death by Race/Ethnicity
San Joaquin County, 2008

*Motor vehicle accidents
**Includes both chronic liver disease and cirrhosis
Note: CLRD - Chronic lower respiratory disease, CVD - Cerebrovascular disease
**Prevalence**

Chronic diseases not only are the leading causes of death in the U.S., they are also the leading causes of disability. Chronic diseases cause major limitations in daily living for almost 1 out of 10 Americans.\(^6\) As shown in Table 3, the prevalence of asthma, heart disease and diabetes in SJC is above the statewide rates for California. Type II diabetes accounts for 83.8% of the total amount of diabetes in SJC.

**Table 3. Prevalence of Chronic Conditions, SJC and CA,**

<table>
<thead>
<tr>
<th>Chronic Condition</th>
<th>SJC Prevalence</th>
<th>CA Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (All Ages)</td>
<td>16.7%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Asthma (≥18 Years of Age)</td>
<td>15.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Asthma (&lt;12 Years of Age)</td>
<td>16.9%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>8.0%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Diabetes (≥18 Years of Age)</td>
<td>8.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Type II Diabetes (≥18 Years)*</td>
<td>83.8%</td>
<td>87.1%</td>
</tr>
</tbody>
</table>

Source: 2007 California Health Interview Survey

*Percent of total cases of diabetes

**Contributing Factors**

Much of the chronic disease burden is preventable and/or controllable with a healthy lifestyle and an environment that supports healthy choices. Physical inactivity and unhealthy eating contribute to obesity and a number of chronic diseases, including some cancers, cardiovascular disease, stroke, osteoporosis, and Type II diabetes. Sixty-five percent (65%) of adults in SJC are overweight or obese, and more than 33% of children (in grades 5, 7, and 9) are overweight or obese (Table 4). Other factors that contribute to chronic disease rates include blood pressure levels and smoking. Almost 30% of adults in SJC have high blood pressure, and more than 15% of county residents smoke.
Table 4. Factors Contributing to Chronic Disease, SJC and CA

<table>
<thead>
<tr>
<th>Contributing Factors</th>
<th>SJC Prevalence</th>
<th>CA Prevalence</th>
<th>HP 2010 Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight (≥18 Years of Age)</td>
<td>36.1%</td>
<td>34.4%</td>
<td>n/a</td>
</tr>
<tr>
<td>Obese (≥18 Years of Age)</td>
<td>28.9%</td>
<td>22.7%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Overweight or Obese (5-11 Years of Age)†</td>
<td>22.8%</td>
<td>24.1%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Overweight or Obese (Grades 5, 7, 9)*</td>
<td>33.4%</td>
<td>31.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>28.3%</td>
<td>26.1%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Current Smoker</td>
<td>15.4%</td>
<td>13.3%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

Source: 2007 California Health Interview Survey, unless noted otherwise
†2007 Pediatric Nutrition Surveillance System
* California Department of Education, 2007-08 California Physical Fitness Report

Overweight = Body Mass Index (BMI) > 25.0 - 29.9 kg/m²
Obese = BMI ≥ 30.0 kg/m²

Prevention: Physical Activity & Nutrition
Physical inactivity has been found to contribute to obesity and increases the risk of chronic diseases such as cardiovascular disease and Type II diabetes. The level of physical activity among youth and teenagers in SJC is below the statewide rate and only 14.2% of adults in the county engage in a healthy amount of physical activity (Table 5).

Table 5. Physical Activity, SJC and CA, 2007

<table>
<thead>
<tr>
<th>Type of Physical Activity</th>
<th>SJC Prevalence</th>
<th>CA Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigorous Activity at least 3 days/week for 60 min/day (&lt;12 Years of Age)</td>
<td>68.6%</td>
<td>70.1%</td>
</tr>
<tr>
<td>Vigorous Activity at least 3 days/week for 60 min/day (12-17 Years of Age)</td>
<td>62.1%</td>
<td>64.7%</td>
</tr>
<tr>
<td>Vigorous Activity at least 3 days/week for 20 min/day (≥18 Years of Age)</td>
<td>14.2%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

Source: 2007 California Health Interview Survey
In SJC, more than 89% of adolescents in the county report having eaten fast food in the last week (Figure 6), and more than 77% consume at least one soda per day (Figure 7). The consumption of one or more sodas per day for SJC teens aged 12-17 is the highest when compared to other California counties. These are factors that have been shown to increase the risk of obesity.

Source: California Health Interview Survey, 2007
According to the Centers for Disease Control and Prevention (CDC), maternal obesity during pregnancy is associated with many complications such as cesarean delivery, macrosomia (fetal weight >4,000 grams), gestational hypertension, preeclampsia (development of hypertension during pregnancy), gestational diabetes mellitus, fetal death, and possible birth defects. Maternal obesity also increases the long-term risks for the fetus. Children born to obese mothers are twice as likely to be obese and to develop Type II diabetes later in life.\(^8\)

Currently 1 out of 5 women in the United States (20%) are obese at the beginning of pregnancy.\(^8\) This rate is 25% among SJC women overall and even greater in African-American and Hispanic women (Figure 8). CDC recommends that efforts to prevent obesity and maintain a healthy weight in women of childbearing age should be a public health priority.

**Figure 8. Percent of Mothers that were Overweight or Obese Prior to Pregnancy by Race/Ethnicity, San Joaquin County, 2008**

Source: San Joaquin County Birth Statistical Master File, 2008
**Prenatal Care**

For pregnant women in SJC, access to and utilization of prenatal care in the first trimester of pregnancy has been low. The rate of first trimester prenatal care in SJC is significantly lower than the Healthy People (HP) 2010 goal of 90%. Failure to meet the HP 2010 objective was observed for all age groups and races in SJC in 2008 (Figure p). Of particular note, teen mothers have a lower percentage of prenatal care in the first trimester than other age groups, and, in all age groups, women of color have a lower percentage of first trimester prenatal care than white women. However, the data from 2008 show an increase in the overall percentage of women receiving prenatal care early (71.3%), the highest rate seen since 2003. This increase may be a result of the “Go Before You Show” campaign that was initiated in 2007, and encourages women to see a doctor within the first three months of pregnancy. The message of this campaign has been delivered to the community in several ways, including an Internet website (gobeforeyoushow.com), radio announcements, and posters.

![Figure 9. First Trimester Prenatal Care by Race/Ethnicity and Age of Mother, San Joaquin County, 2008](image)

Source: San Joaquin County Birth Statistical Master Files, 2008
Preterm Birth
Studies have shown that the lack of adequate prenatal care early in pregnancy is associated with poor birth outcomes. In SJC, the low rates of early prenatal care have contributed to a high percentage of preterm births (<37 weeks gestation). In year 2008, the rate of preterm births in SJC improved dramatically by dropping to 11.1%, which is the lowest level for the time period from 1999-2008. However, this is still significantly higher than the HP 2010 goal of 7.6%. In looking at the data broken out by race/ethnicity and mother’s age (Figure 10), it is apparent that women of all age groups and races exceed the HP 2010 goal, especially African-American women of all ages.

Preterm birth can have a lifelong impact on a child’s health. Research shows that premature birth puts the fetus at greater risk for insulin resistance syndrome, coronary heart disease, and certain cancers as he/she ages. There are many other short- and long-term impacts of premature birth, including vision problems, cerebral palsy, and asthma. As many as half of all pediatric neurodevelopment problems can be attributed to preterm birth.

![Figure 10. Preterm Births by Race/Ethnicity and Age of Mother, San Joaquin County, 2008](image-url)

Source: San Joaquin County Birth Statistical Master Files, 2008
**Low Birthweight**

Similar to preterm births, low birth weight (<2500g) is correlated with low rates of early prenatal care. Maternal high blood pressure, and heart, lung, and kidney problems sometimes can also reduce birthweight.\(^{11,12}\) From 1999-2008, except for a slight decrease in 2007, the percentage of births in SJC that were low birth weight steadily increased. In 2008 the rate was 7.2%, which is the highest rate for the ten year period. This percentage is also above the HP 2010 objective of 5.0% of births being low birthweight. However, when looking at the data stratified by maternal race/ethnicity and age (Figure 11), there are a lot of differences between the various races and ages. While Hispanics and Whites in the 20-34 year old age group came very close in 2008 to meeting the HP 2010 goal, African Americans in all age groups far exceeded the HP 2010 objective, especially women in the 19 and under age category. African-American women of all ages also have the highest rates of very low birth weight babies (<1500g), although White women in the 19 and under age category also have a high rate.

**Figure 11. Low and Very Low Birth Weight Infants, San Joaquin County, 2008**

![Birthweight chart]

Source: San Joaquin County Birth Statistical Master Files, 2008

It is apparent in looking at the data for entry into prenatal care, low birthweight births, and preterm births, that the African-American population in the county has poorer birth outcomes compared to the other races/ethnicities. As a result, SJC Public Health Services Maternal, Child, and Adolescent Health (MCAH) program has been the recipient of funding for a Black Infant Health (BIH) program. The goals of this program are to increase the number of first trimester prenatal care visits by pregnant African-American women, reduce the number of deaths of African-American infants, and foster the continuity of health care services during the perinatal and interconception periods for African-American women and their infants.
REFERENCES/TECHNICAL NOTES

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7. 2005 California Health Interview Survey.
8. CDC, National Center for Chronic Disease Prevention and Health Promotion, Division of Reproductive Health. http://www.cdc.gov/reproductivehealth/maternalinfanthealth/PregComplications.htm