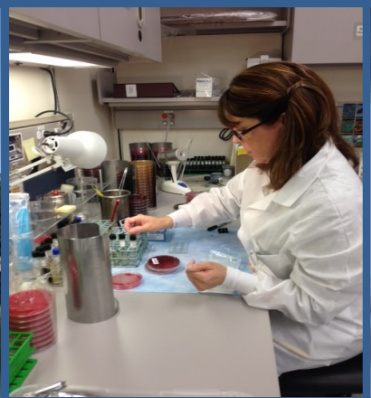


# Community Health Status Report

SACRAMENTO COUNTY

2014



# Community Health Status Report 2014

## *A Description of the Health Status and Mortality Experience of Sacramento County Residents*

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**Public Health**

Sacramento County, Department of Health and Human Services, Public Health Division, is pleased to bring you the 2014 Community Health Status Report. The purpose of this report is to provide an overview of some of the key community health indicators and trends in our County. One of the primary roles of public health is to systematically collect, analyze, report and disseminate information about the health of the County's population. This is done to encourage collaboration to support community-driven health improvement intervention and policy. This report presents public health data that can be directly compared with clearly established benchmarks, such as national standards and is meant to be a tool for learning as well as planning.

This is the third edition of the Community Health Status Report. This year's report includes data on life expectancy, social determinants of health, chronic disease, communicable disease, births and mortality. As much as possible, we compared our local data to State or national Healthy People 2020 Objectives. In addition to health related indicators, we included other socio-economic factors that influence the health status of the population.

The community is the most valuable partner in public health. Therefore the broad purpose of the report is to help policy-makers, educators, community members and program planners identify priority issues and measure progress in the domain of population health. The general public, health professionals and organizations that deal with preventing disease and mortality will find the information in the report useful. We value your opinions about this report and welcome the opportunity for feedback and collaboration.

### Mission, Vision and Values

**Mission:** The mission of Sacramento County Public Health is to promote, protect, and assure conditions for optimal health and public safety for residents and communities of Sacramento County through leadership, collaboration, prevention and response.

**Vision:** Optimal health and well-being for Sacramento County communities!

#### **Values:**

**Collaboration:** We value collaboration and diversity.

**Dedication:** We are dedicated to meet the public health needs of Sacramento County residents and communities.

**Quality:** We provide high quality and effective services based on best practices and the most current information and resources.

**Competence:** We hire staff with essential skills, education, experience and certification to accomplish program goals.

**Responsiveness:** We listen to community needs, monitor community health, and develop responses to match needs.

**Accountability:** We accept responsibility and accountability for providing efficient and quality service. We conduct ourselves with integrity in delivering services.

**Diversity:** We respect and value diversity within the community and strive to deliver services that are respectful and relevant to the needs, values, and beliefs of the community. We seek to recruit and hire diverse staffs that enhance our level of understanding of various populations and to promote cultural competence.

**Efficiency:** We look for the most efficient way to get the job done.

## *Acknowledgements*

The Department of Health and Human Services acknowledges all health care providers for their timely reporting of communicable diseases to the Disease Control and Epidemiology Unit.

## *Technical Notes*

### **Population Data**

The population data used in this report are from the State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050, Sacramento, CA, May 2007 and State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010–2060. Sacramento, CA, Jan 2013.

### **Birth (including Prenatal Care) and death data**

The birth and death data presented in this report are from the State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

### **Communicable Disease Data**

The data presented on communicable disease in Sacramento County were obtained from the State of California, Department of Public Health, the HIV and AIDS registry (EHARS), California Reportable Disease Information Exchange (CalREDIE), and the TB registry. Please note that all communicable disease data for 2012 are provisional.

### **Chronic Disease Data**

The data for chronic diseases in Sacramento County are based on the information obtained from the 2001, 2003, 2005, 2007, 2009 and 2011 California Health Interview Survey (CHIS).

### **Social Determinants of Health Data**

The social determinants of health indicator data were obtained from California Department of Public Health, Office of Health Equity.



Monitoring the occurrence of disease and mortality in the population is vital to understanding and limiting their impact on human health. This Community Health Status Report focuses on social determinants of health and general health indicators, including birth rates, prenatal care, sexually transmitted infections, asthma, diabetes, obesity, heart disease and infant mortality. The statistics provide a picture of the health status and mortality experiences of residents in Sacramento County.

This report accomplishes essential public health functions such as monitoring the health status of a community to identify community health problems, and informing, educating and empowering people to manage health issues in their communities.

### Highlights of Major Findings

#### Demographics

- The population in the County of Sacramento increased by 9.0% between 2003 and 2013.
- The Hispanic population increased the most of all races and ethnicities in Sacramento County, increasing by 31.0% in the period between 2003 and 2013.
- Sacramento County's population is aging. From 2003 to 2013, there was a 54.2 % increase in the population over ages 60-69, and a 44.7% increase over age 85 and older.

#### Social Determinants of Health

- Unemployment has been slowly decreasing from late 2009 in Sacramento County to 8.9% in August of 2013.
- The most common occupation in Sacramento County falls in the category of "Management, Business, Science and Arts"
- 63.2% of Sacramento County's residents reported at least some college education in the five years average (2007-2011). This was slightly higher than the State as a whole (59.8%).
- High school graduation rate increased 4.4% from school year 2009/2010 to 2011/2012 for Sacramento County.
- People with no health insurance coverage increased from 2001 to 2011 in Sacramento County.



### **Life Expectancy**

- From 2002 to 2011, life expectancy increased for all racial and ethnic groups.
- In 2011, Hispanic residents had the highest life expectancy (87.7 years) and African Americans had the lowest (73.8 years). On average, Hispanic residents live 13.9 more years than their African American counterparts, 9.1 more years than Caucasians and 3.6 more years than Asians and Pacific Islanders.
- Hispanics experienced the greatest increase in life expectancy over the time span (4.7 %).

### **Births**

- The number of births increased from 2002 to 2011.
- During the 10-year period, Hispanics had the highest birth rate of all the race/ ethnicities.
- Although teenage birth rates declined for all racial and ethnic groups, Hispanic and African American teens continued to have birth rates that were more than twice that of Caucasian teens.
- Low birth weight birth rates were significantly higher for African Americans than for any other racial or ethnic groups.
- From 2002 to 2011, Sacramento County did meet the Healthy People 2020 Objective of reducing births with low birth weight to less than 7.8% of all live births.

### **Communicable Diseases**

- Chlamydia was the most commonly reported communicable disease in Sacramento County with 8,351 cases of Chlamydia reported in 2012, a 43.4 % increase since 2003. During the same year, 31.8% of chlamydia infections were in teenage girls between the ages of 15 and 19. The rate of chlamydia was 29.2% higher than the State rate in 2012.
- In 2012, Gonorrhea was the second most commonly reported communicable disease in Sacramento County. Of the 2,156 reported cases of Gonorrhea, 26.5% occurred in teenage girls ages 15-19 years, in 2012. During the 10-year period, the incidence rate of Gonorrhea increased by 12.3%. The incidence rate was 67.6% higher than the State in 2012.

- The number of cases of primary and secondary Syphilis is increasing. In 2003, there were 13 cases of primary and secondary syphilis reported compared to 138 cases of primary and secondary syphilis reported in 2012.
- The incidence of AIDS in the Sacramento County declined 20.2% from 8.4 per 100,000 population in 2002 to 6.7 per 100,000 population in 2011.
- For the past 10 years, statewide incidence rates for Tuberculosis have steadily declined, whereas rates in the County have fluctuated due to sporadic outbreaks among different racial/ethnic groups and homeless persons.

### **Chronic Disease**

- Based on the 2001-2011 California Health Interview Survey (CHIS) results, Sacramento County has a higher prevalence of asthma than the State across all years. In 2011, Multi-race (27.2%) followed by Caucasians (18.2%) and African Americans (11.7%) had the highest prevalence of asthma, and young adults aged 18-24 years (26.0%) followed by ages 25-64 years (15.3%), had the highest prevalence of all age groups.
- In 2011, Sacramento County had a higher diabetes prevalence rate than the State, with the prevalence of diabetes in residents ages 65 years and over being significantly higher than in other age groups.
- The prevalence of heart disease was lower than the State's average (5.2% versus 6.3%). Residents greater than age 65 years had the highest heart disease prevalence. The rate declined by 38.2% from 2001 to 2011.
- Cancer age-adjusted incidence rate was 447.4 per 100,000 population in 2011 for Sacramento, which is 8.4% higher than the State rate. The age-adjusted cancer mortality rate also is 12.8% higher than the State in 2011.

### Infant Mortality

- African Americans had the highest infant mortality rate of all ethnic and racial groups. From 2002 through 2011, African American infants had two to three times the mortality of all other infants born in the County.
- The three leading causes for all infants in 2011 were:
  1. Congenital malformations
  2. Prematurity and low birth weight
  3. Sudden Infant Death Syndrome (SIDS)
- From 2002 to 2011, the overall infant mortality rate decreased from 6.1 in 2002 to 5.5 per 1,000 live births in 2011.

### Mortality

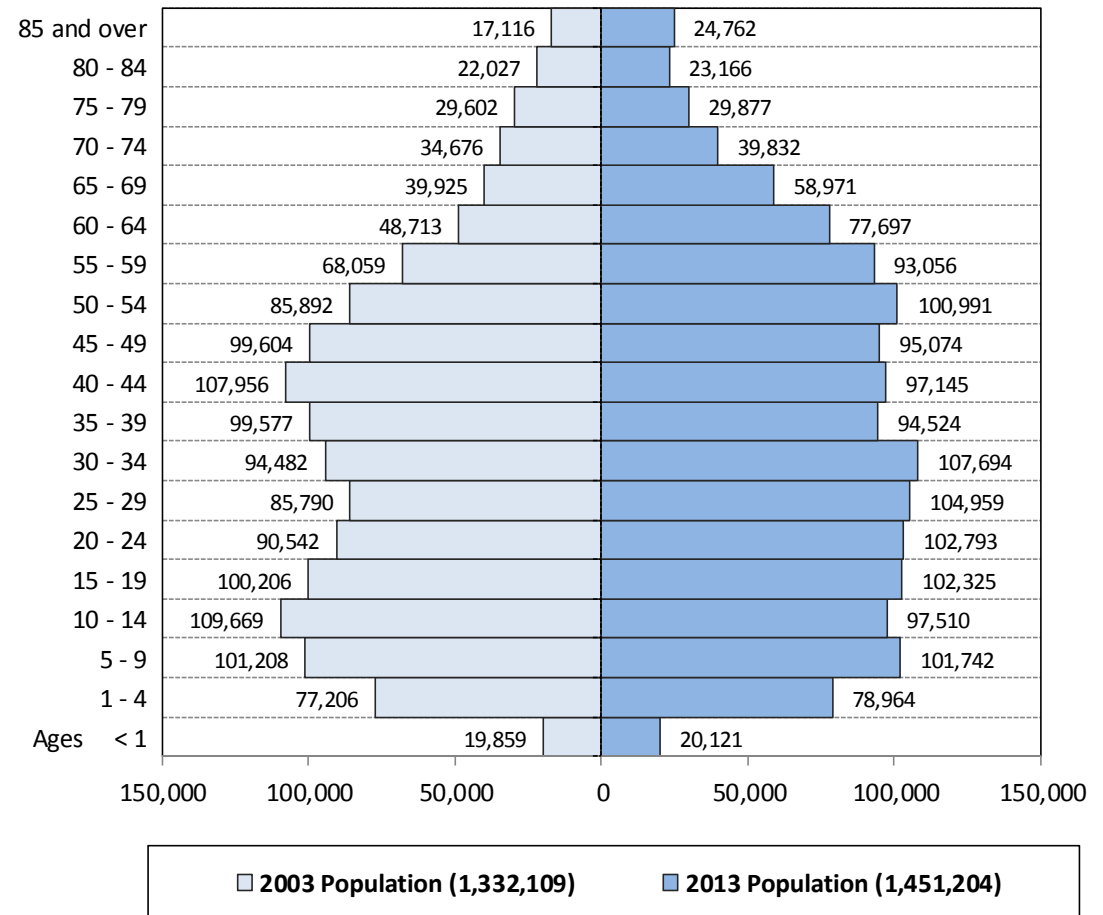
- In 2011, cancer surpassed heart disease as the leading cause of death, and was followed by heart disease, chronic lower respiratory disease (CLRD) and stroke. Diabetes was the 7th leading cause of death.
- Heart disease was ranked number one for Caucasians and American Indian/Alaskan Natives, and number two for all other racial and ethnic groups.
- In 2011, unintentional and intentional injuries together accounted for more than 38% of all deaths in children between the ages of one and 18. Of the unintentional fatal injuries, the vast majority was due to motor vehicle crashes (60%).

## Sacramento County Population

Population data recently released by the California Department of Finance revealed that in 2013, there were 1,451,204 residents living in Sacramento County: an increase of 119,095 residents since 2003. Figure 1 details the age distribution of the population and gives a picture of how the population has changed between 2003 and 2013. During the last decade, the population has become older. From 2003 to 2013, there was a 54.2 % increase in the population age 60-69 years, and a 44.7% increase in these 85 years and older.

The median age was 33.3 years and the average age was 34.7 years, during 2003. The median age for 2013 was 34.4 and the average age was 36.5.

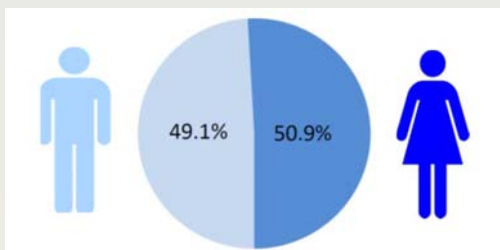
**Figure 1. Sacramento County Residents by Age, 2003 and 2013**



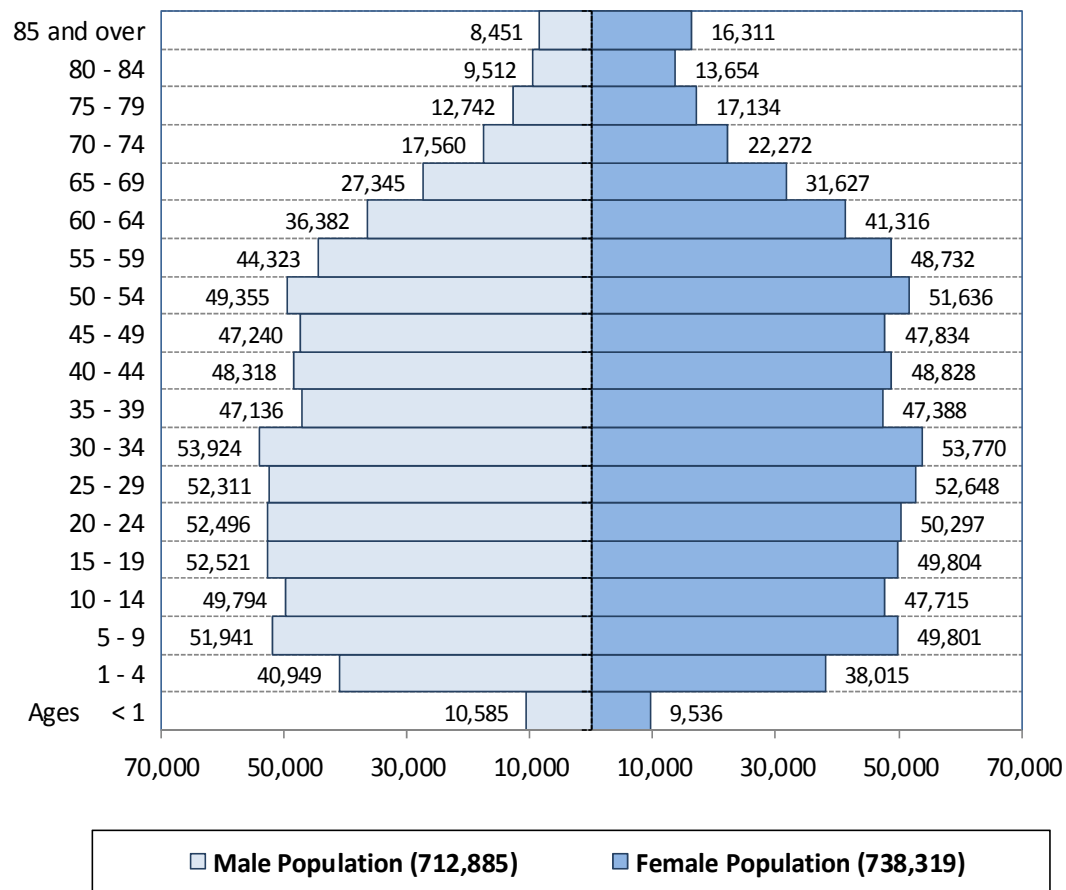
Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010–2060. Sacramento, CA, Jan 2013

## Population by Gender

Figure 2 compares the age and sex distribution for residents in 2013. This graph shows that in 2013, there were more female residents than male residents. There was a higher proportion of females over 65 years old compared to males, 13.2% of females were 65 years or older compared to 10.6 % of males 65 years or older.



**Figure 2. Sacramento County Residents by Age and Gender, 2013**

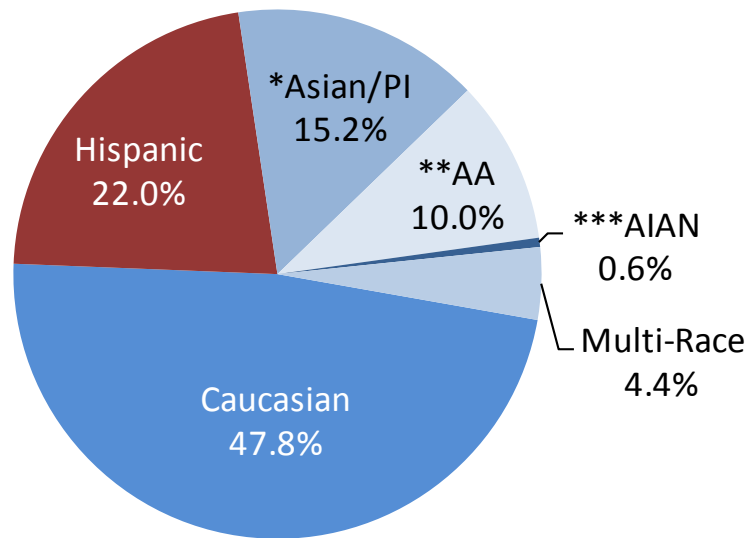


Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010–2060. Sacramento, CA, Jan 2013

### Population by Race and Ethnicity

Figure 3 illustrates the diversity of Sacramento County by race and ethnicity. Beginning with Census 2000, census data have reported multi-race as a category, which enables residents to identify themselves with two or more racial groups. In 2013, 4.4% of the County’s residents identified themselves as multi-racial. Hispanics continue to be the fastest growing population in California. In Sacramento County, Hispanics comprised 22.0% of the population compared to 38.7% in California in 2013.

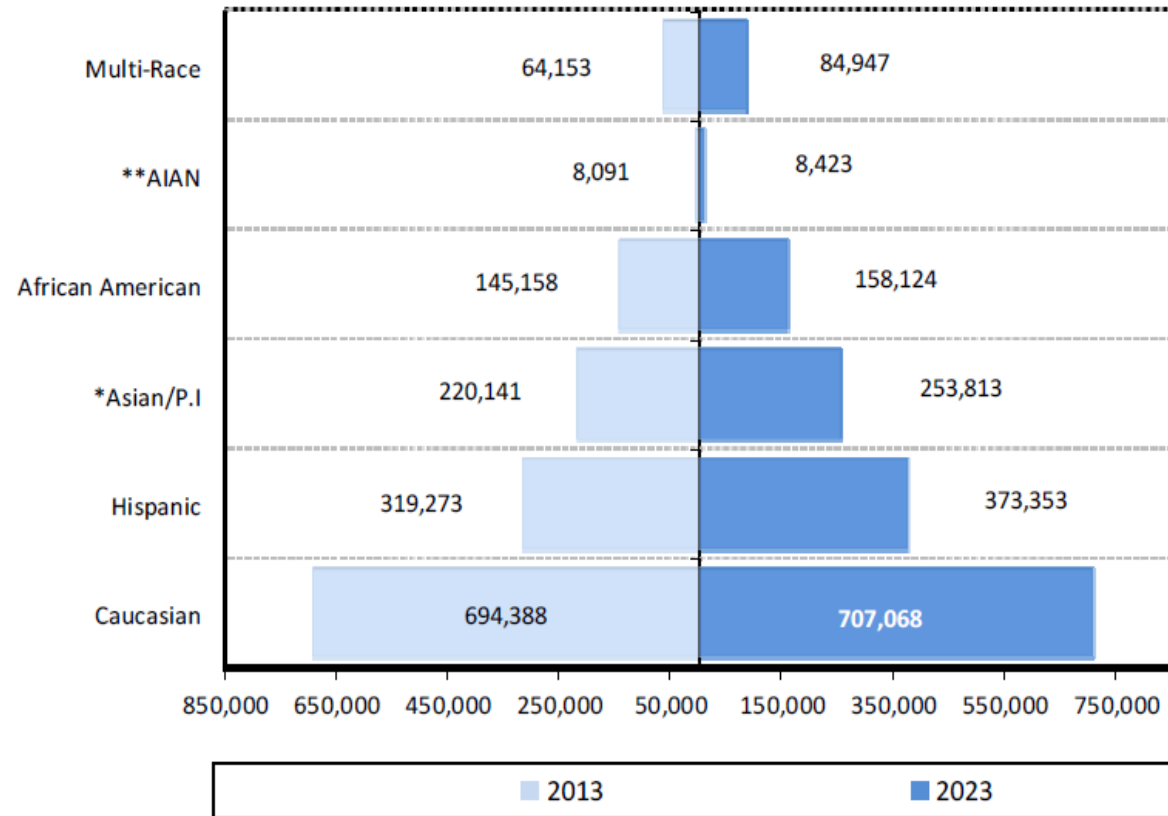
**Figure 3. Population by Race/Ethnicity Sacramento County, 2013**



\*AA: African American  
 \*\*Asian and Pacific Islander  
 \*\*\*American Indian and Alaskan Native  
 Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010–2060. Sacramento, CA, Jan 2013

Figure 4 shows how the racial and ethnic compositions of Sacramento County are expected to change over the next 10 years. According to population projections from the California Department of Finance, in 2023, there will be a marginal increase in Caucasian residents, whereas all other racial and ethnic groups are projected to show moderate to significant increases in population sizes, especially, Hispanics.

**Figure 4. Population Projection by Race and Ethnicity  
Sacramento County 2013 and 2023**



\*Asian/P.I: Asian and Pacific Islanders.

\*\*AIAN: American Indian and Alaskan Native.

Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010–2060. Sacramento, CA, Jan 2013



## Life Expectancy in Sacramento County

Life expectancy is a measure that summarizes health over the entire lifespan. Life expectancy at birth is the average number of years that a newborn can expect to live, assuming that he/she experiences the currently prevailing rates of death throughout his/her lifespan. Table 1 shows that over the ten-year span, the life expectancy for Sacramento County increased from 77.6 years to 79.5 years (2.4% change). Life expectancy also increased for all racial and ethnic groups, especially for African Americans and Hispanics. In 2011, Hispanic residents had the highest life expectancy (87.7 years), followed by Asian/Pacific Islanders (84.1 years), Caucasians (78.6 years) and African Americans (73.8 years).

**Table 1. Life Expectancy by Race/Ethnicity, Sacramento County, 2002-2011**

Year	Overall	Hispanic	Caucasian	African-American	Asian/PI
2002	77.6	83.7	76.9	71.6	83.1
2003	77.8	84.8	77.1	71.9	82.6
2004	78.2	86.6	77.5	71.9	83.4
2005	78.1	86.3	77.3	71.7	83.9
2006	78.4	86.7	77.7	72.4	83.8
2007	79.2	86.5	78.6	73.0	83.7
2008	79.4	87.5	78.8	73.3	83.5
2009	79.8	86.6	78.9	73.9	84.9
2010	79.7	86.6	79.0	74.2	82.8
2011	79.5	87.7	78.6	73.8	84.1
<b>% increase</b>	<b>2.4</b>	<b>4.7</b>	<b>2.2</b>	<b>3.1</b>	<b>1.2</b>

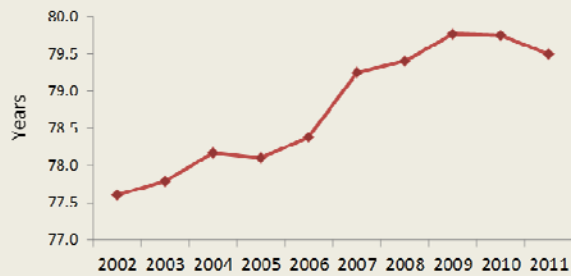
Data Source:

Population - State of California, Department of Finance,  
Race/Ethnic Population with Sex Detail, 2000-2050, Sacramento, CA , July 2007.  
Life Expectancy Calculation - Chiang (I) Method. United Kingdom

## Life Expectancy by Zip Code

Of the 56 zip codes in Sacramento County, two zip codes (95834 and 95835) were associated with the highest life expectancy during 2012 (See Map 1).

Life Expectancy by Year, Sacramento County 2002-2011

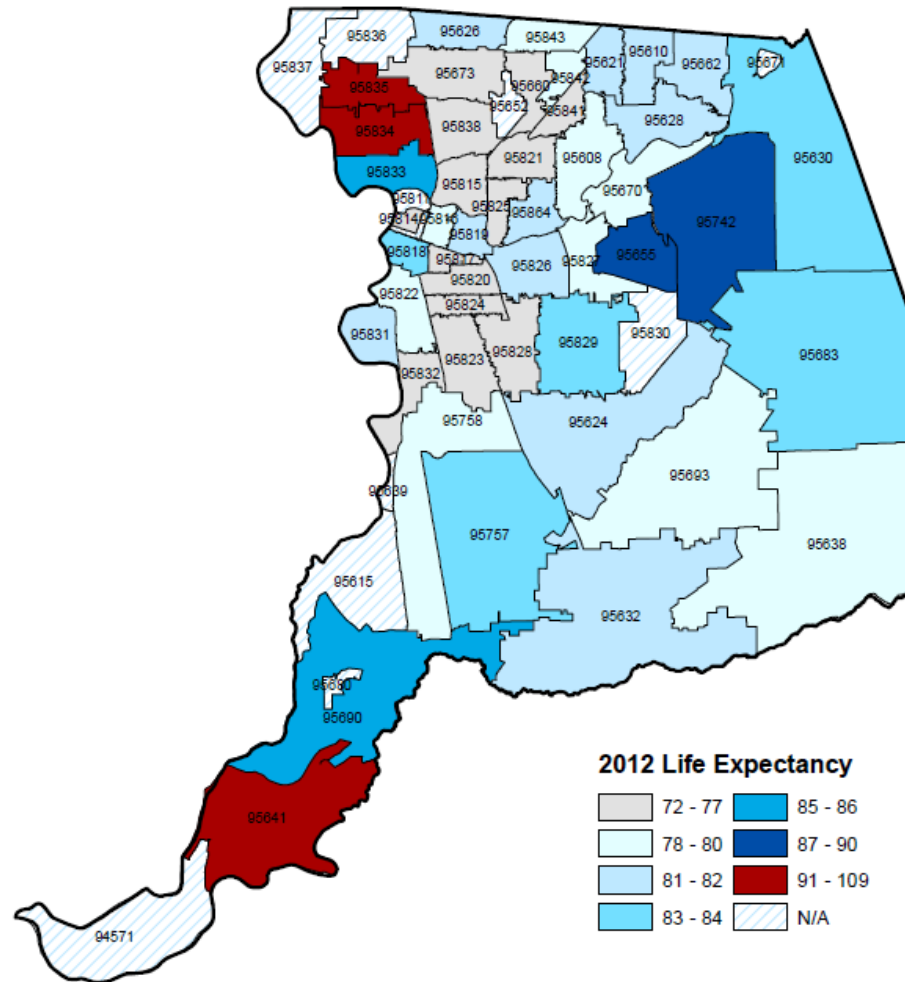


Data Source:

Population - State of California, Department of Finance, Race/Ethnic Population with Sex Detail, 2000-2050, Sacramento, CA, July 2007.

Life Expectancy Calculation - Chiang (I) Method. United Kingdom

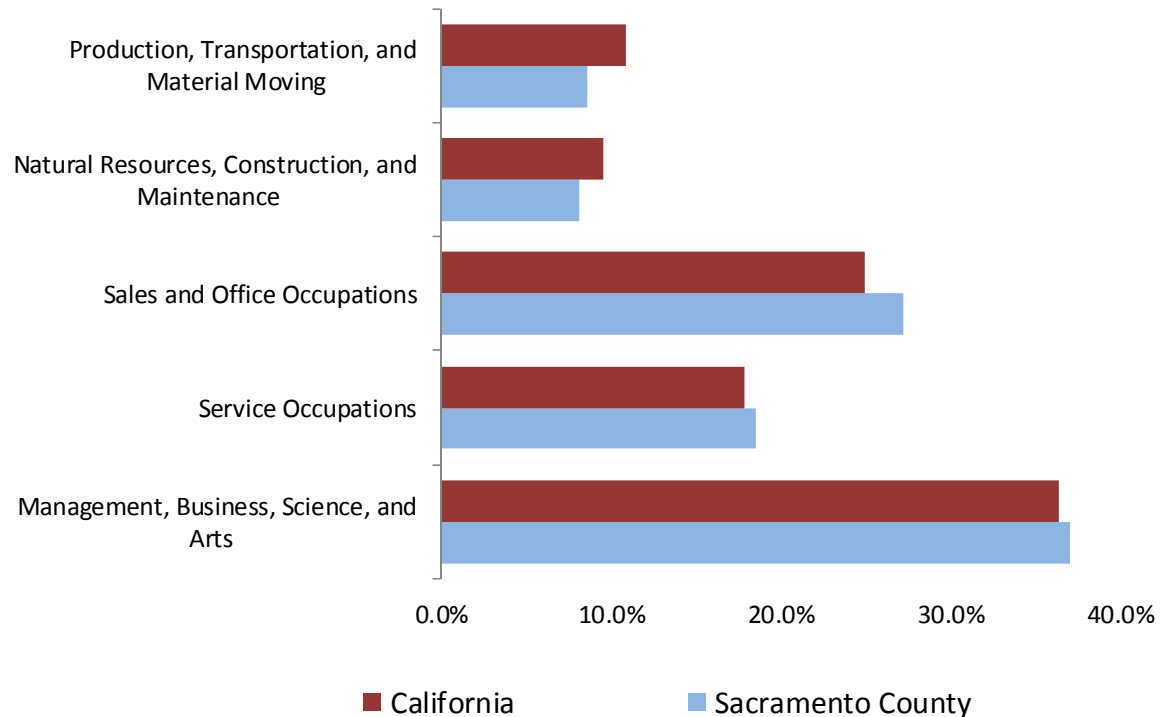
Map 1. Life Expectancy by Zip code Sacramento County, 2012



## Occupation

Sacramento County has a variety of working environments to suit an assortment of skills and professions. A healthy society is made up of many different skills and professions to meet the needs of the community. According to the survey, the majority of Sacramento residents work in management, business, science, and arts followed by sales and office occupations. The percentage of residents in each occupational category is comparable to the percentage at the statewide level (Figure 5).

**Figure 5. Sacramento County and California Occupation by Category 2007-2011**

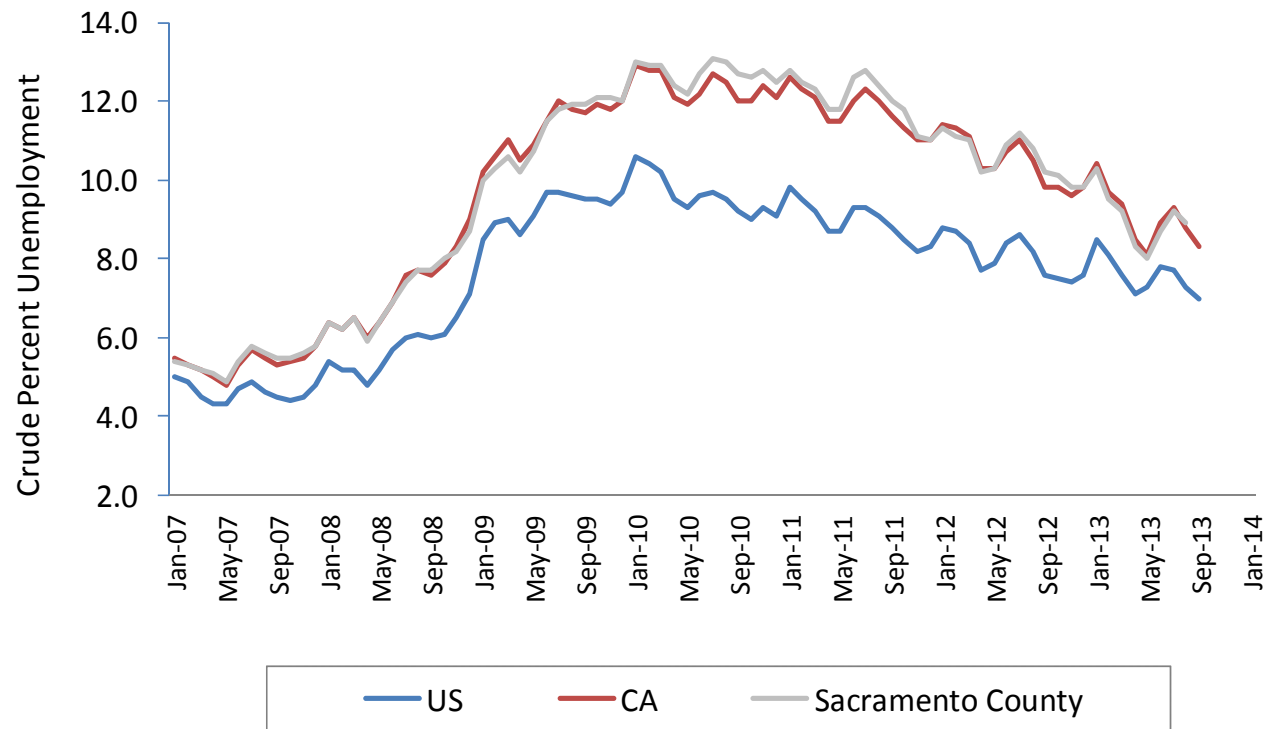


Source: The California Department of Public Health: Healthy Communities and Indicators Project

## Unemployment

The unemployment rate is a crucial measure for assessing the need for jobs in a county. The unemployment rate in the County follows very closely to the State's unemployment rate (Figure 6). Both Sacramento County's and California's unemployment rates remain above the national rates for the timeframe examined. Sacramento County's unemployment rates have been decreasing since the end of 2011; however, rates in the Nation, State and the County were higher in 2013 than before the recession, in 2007.

**Figure 6. Crude Unemployment Rate in U.S., California and Sacramento from January 2007 - September 2013**



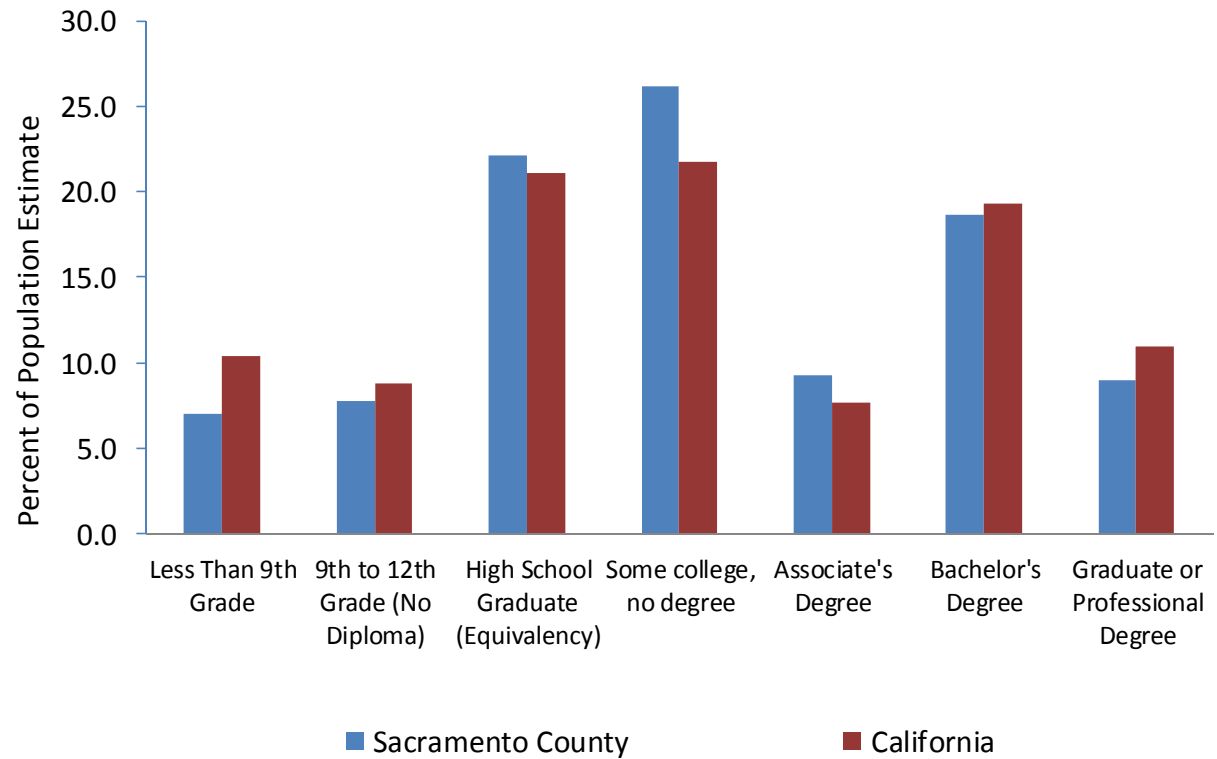
Source: The United States Department of Labor

## Education

Sacramento County is home to several academic institutions. Education is critical to a healthy community. It equips individuals to compete for better employment opportunities and provides confidence to make healthy decisions. The majority of Sacramento County residents reported at least some college education (63.2%). This was slightly higher than the State as a whole (59.8%).



**Figure 7. Sacramento County and California Educational Attainment Among Adults (≥ 25 yrs) 2007-2011**

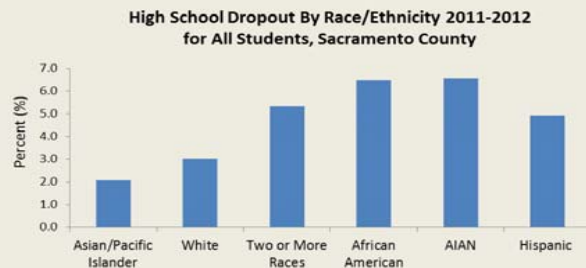


Source: The California Department of Public Health: Healthy Communities and Indicators Project

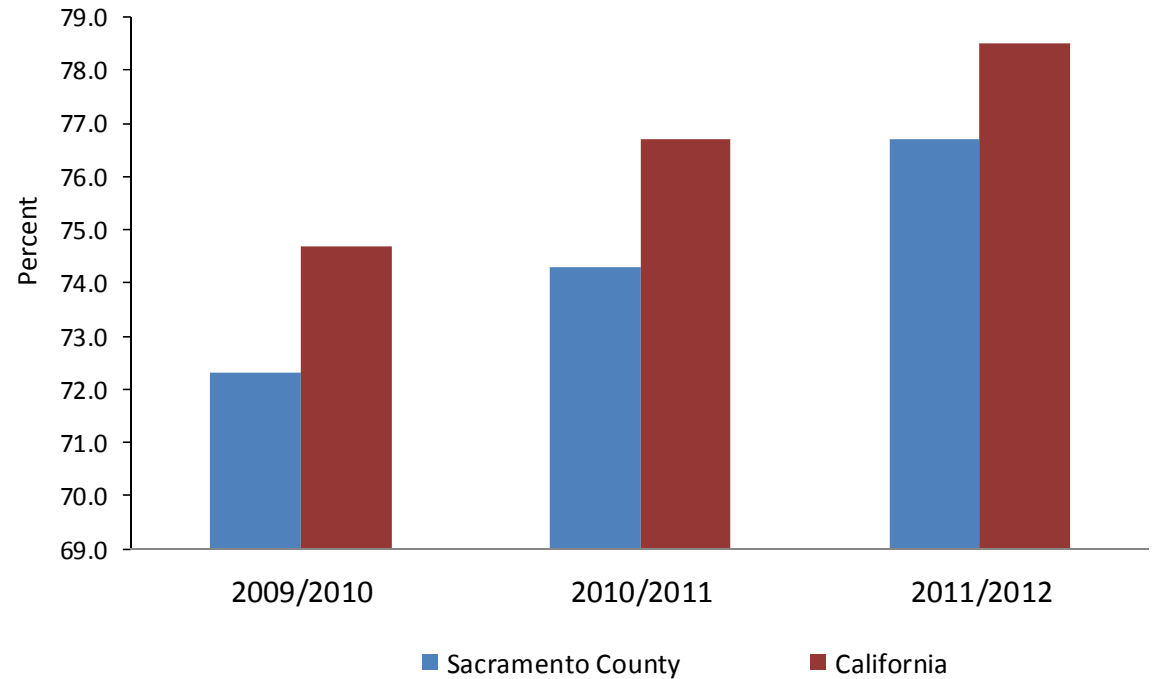
## High School Graduation Rate

The graduation rate is the percentage of the students expected to graduate in four years that actually did graduate. Sacramento County shows an increasing trend in graduation rates across the school years from 72.3% in 2009/2010 to 76.7% (4.4% increases) in 2011/2012 as indicated in Figure 8. The increasing trend in Sacramento County is consistent with the increase at the state-level though, Sacramento is consistently lower than the State's rates for the years displayed.

The high school dropout rate for school year 2011-2012 varied by race/ethnicity. It was highest for African Americans at 6.4% (See insert).



**Figure 8. Percent Cohort High School Graduation Rates by School Year, 2009-2012**



Source: Ed-Data - Education Data Partnership

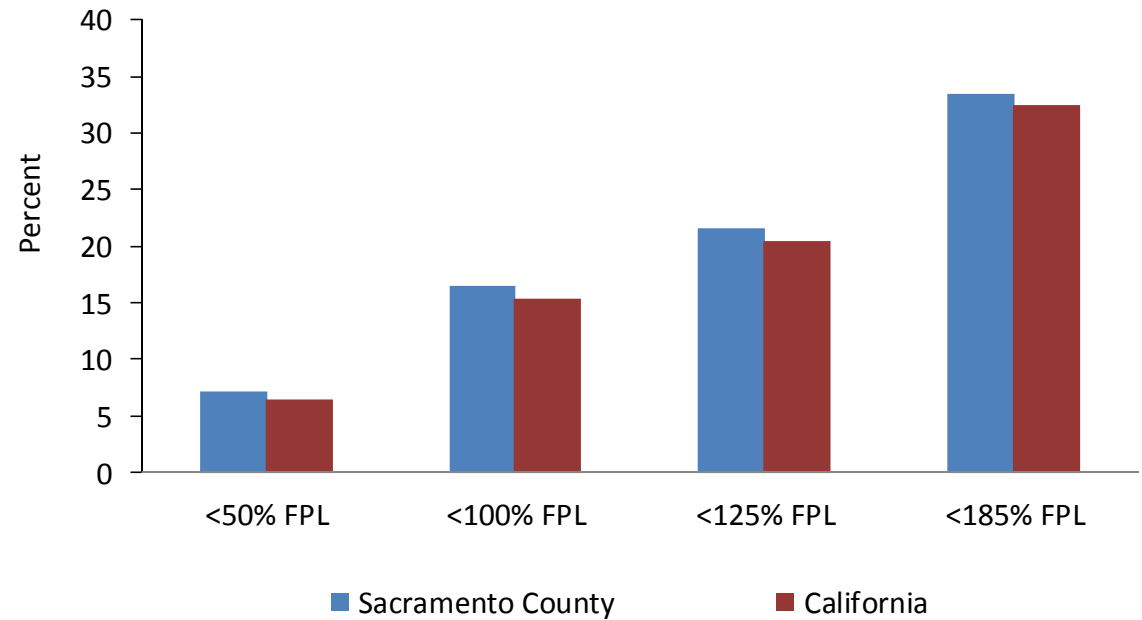
Note – General Education Degree Recipients, Special Education Certificates of Completion or those that remain enrolled without a diploma are not included in these rates.

## Poverty Levels

Figure 9 shows that Sacramento County had a slightly higher percentage of individuals living in poverty compared to the State.

More than 30% of families in Sacramento reported an income at or below 185% the Federal Poverty Level (FPL).

**Figure 9. Percent Population by Levels of Poverty, Sacramento County vs. California, 2008-2012**



Source: The California Department of Public Health: Healthy Communities and Indicators Project.



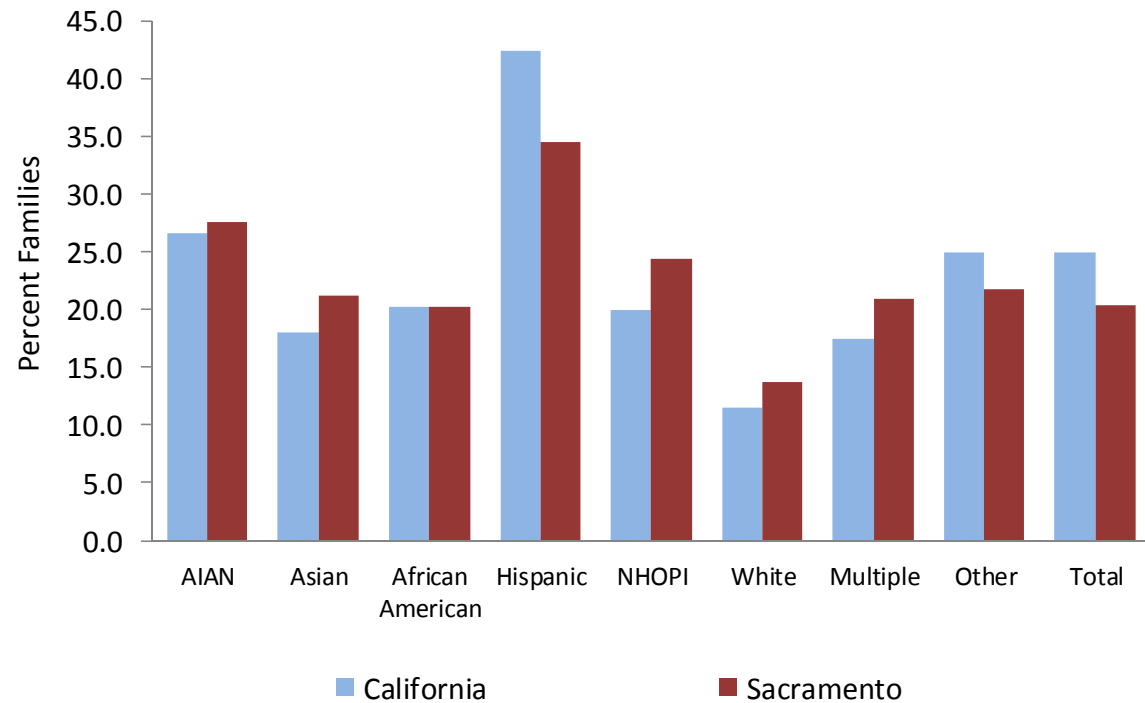
## Living Wage

The living wage in Sacramento County for one adult with two children is \$20.17 per hour.

Of the approximately 510,967 households in Sacramento County, those reporting as Hispanic showed the greatest percentage of poverty.



**Figure 10. Families Living Below the Living Wage by Race/Ethnicity in 2010**



AIAN – American Indian / Alaska Native  
 NHOPI – Native Hawaiian / Other Pacific Islander

Source: The California Department of Public Health: Healthy Communities and Indicators Project

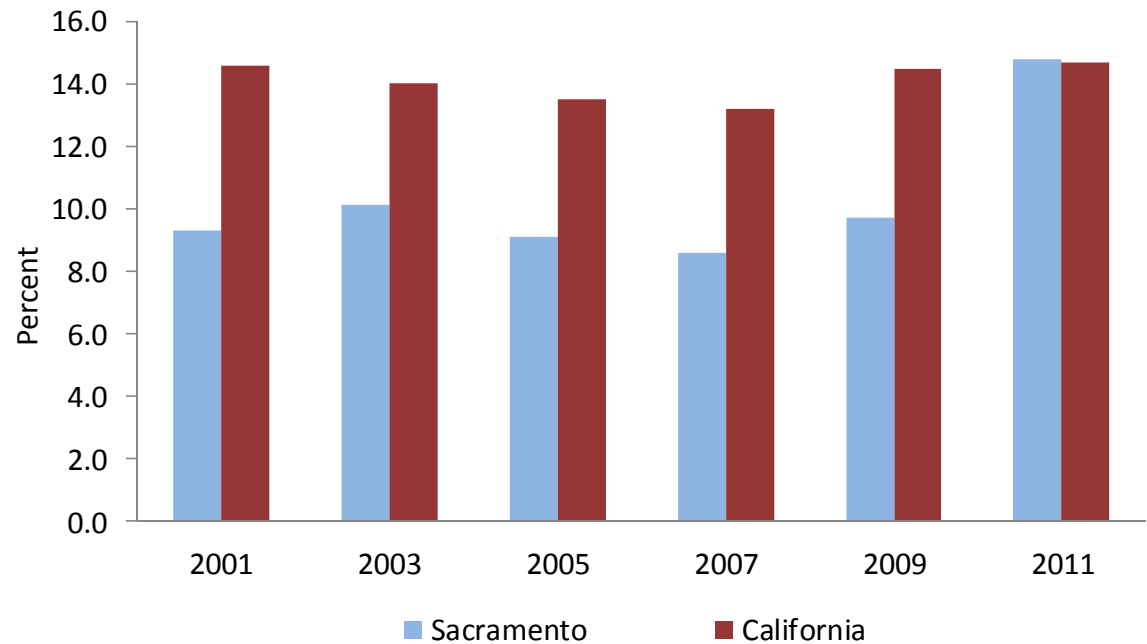
## Health Insurance

Health insurance is a major factor in maintaining health. People who do not have health insurance coverage may incur high medical costs. They often do not access preventative services, and do not have a medical home.

Figure 11 shows that Sacramento County's percentage of individuals with no insurance almost doubled in the period of 10 years. The percentage for the State also increased, but not as dramatically.

These numbers are expected to be reduced with the initiation of the ACA (Affordable Care Act).

**Figure 11. Percent with No Health Insurance Coverage, Sacramento County vs. California, 2001-2011**



Source: California Health Interview Survey (CHIS)

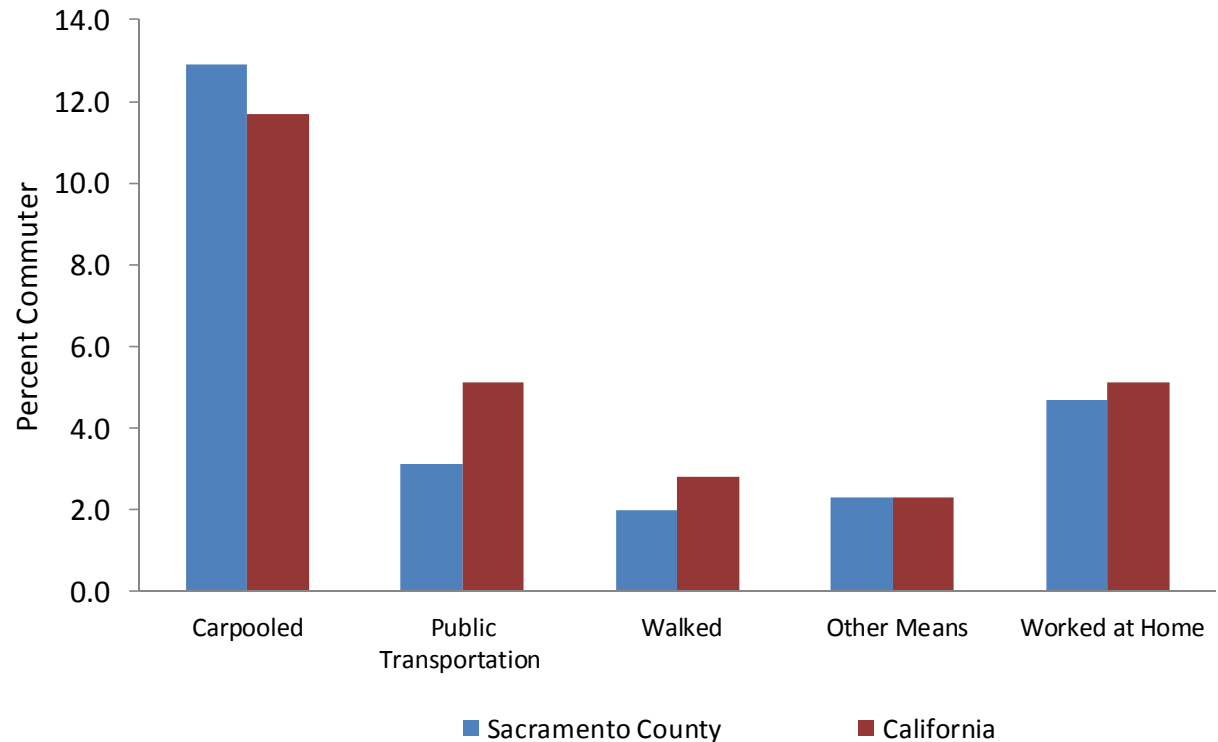
## Transportation

The majority (75.0%) of commuters reported driving alone. That is 2.0% higher than the statewide estimate of 73.0%. Although studies show that 18.9% of the population had access to public transit within ½ mile, only about 3% of commuters used public transit.

Figure 12 shows that the State had a higher percentage of commuters using public transportation and walking than the County. The County had a higher percentage of commuters carpooling than the State.



**Figure 12. Percent Commuters by Transport Method Sacramento County and California, 2007-2011**



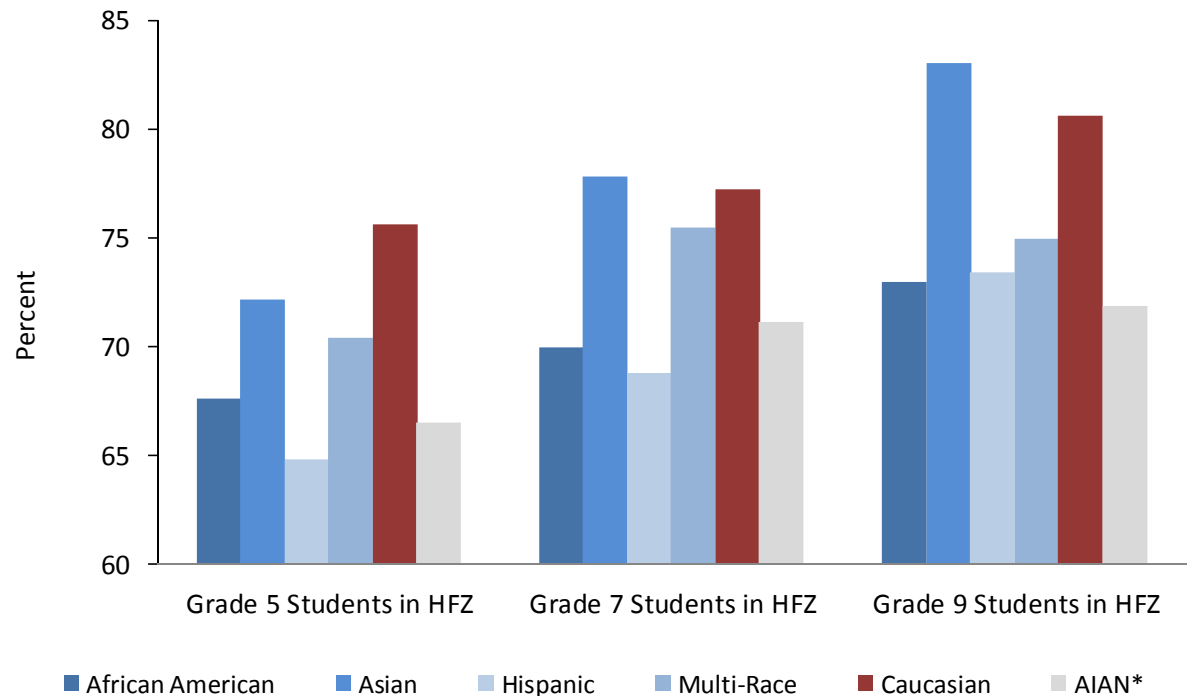
Source: The California Department of Public Health: Healthy Communities and Indicators Project

## Youth Physical Fitness

Physical fitness is an important aspect of public health. Coupled with good nutrition, it can lead to a healthy population.

Figure 13 shows that the majority of Sacramento County youth felled within the Healthy Fitness Zone measure. In general, a higher percentage of youth met the requirements for the healthy fitness zone as they progressed in school. Those populations reporting as Asian, White and Multi-Race were among the highest percentage of youth meeting HFZ requirements across the grades represented.

**Figure 13. Percent of Sacramento County Youth Fitness by Grade, 2012/2013**



Source: California Department of Education – Fitness Gram Data

HFZ: Healthy Fitness Zone - Standards established by The Cooper Institute that represent levels of fitness that offer some degree of protection against diseases that can result from sedentary living. These standards are organized by gender and age.

AIAN\*: American Indian/Alaskan Native

## Births

Table 2 shows that the total number of births for the County increased by 3.9% from 2002 to 2011. By race/ ethnicity, births among Caucasians decreased by 13.2% (1,182 fewer births) in 2011 compared to 2002. In the Multi-Racial group, there was a 91.5% increase from 508 births in 2002 to 973 births in 2011. This is probably attributable to changes in the data collection. Among the Asian/Pacific Islander group, there was a 21.6% increase in births in 2011 compared to 2002.

**Table 2. Total Number of Births by Race and Ethnicity  
Sacramento County , 2002-2011**

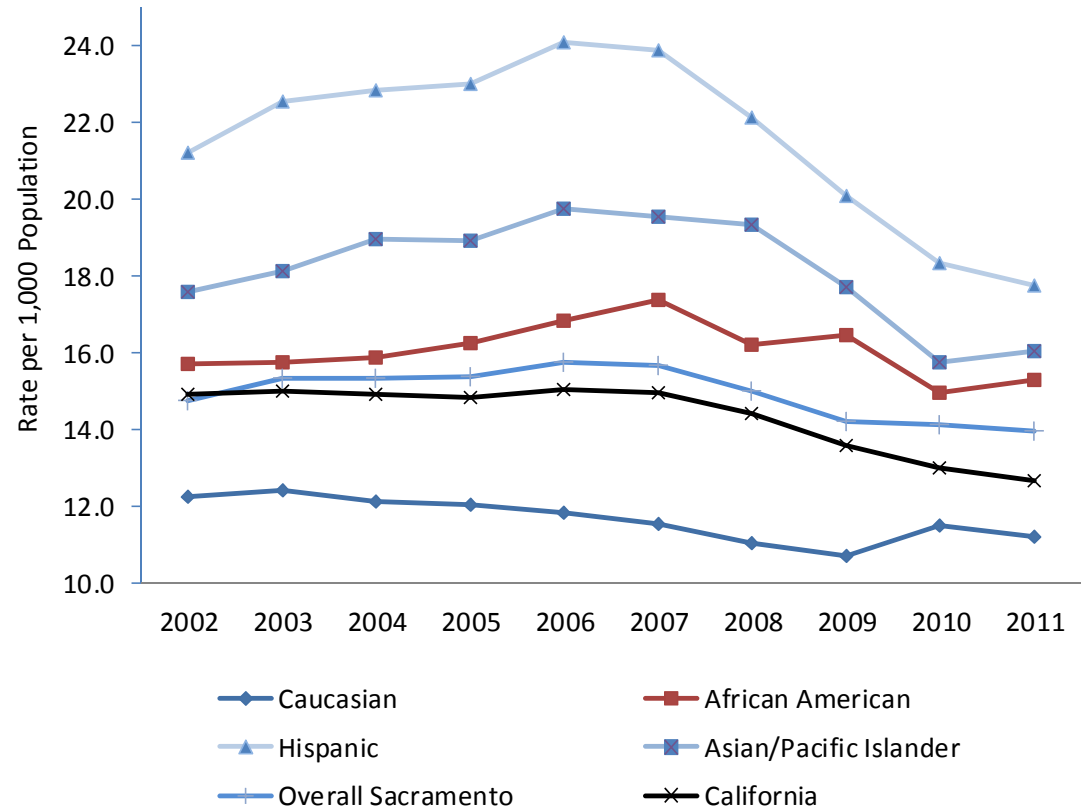
Year	Caucasian	African American	Hispanic	Asian/Pacific Islander	Multi-Race	American Indian	Total Births
2002	8,952	1,955	4,880	2,848	508	100	19,243
2003	9,125	1,987	5,503	3,059	630	120	20,424
2004	8,926	2,023	5,848	3,304	623	112	20,836
2005	8,881	2,091	6,107	3,377	614	114	21,184
2006	8,781	2,195	6,573	3,607	680	116	21,952
2007	8,565	2,289	6,662	3,637	837	120	22,110
2008	8,224	2,158	6,316	3,666	916	109	21,389
2009	7,996	2,219	5,856	3,416	861	78	20,426
2010	7,973	2,107	5,640	3,373	873	89	20,055
2011	7,770	2,183	5,533	3,464	973	75	19,998

Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

## Birth Rates

The birth rate (entire county, specific racial or ethnic group) is calculated as the number of live births to a certain population divided by the total number of people in that population, and is reported per 1,000 population. Rates for the County decreased from 14.8 in 2002 to 14.0 in 2011 per 1,000 population. The overall birth rate for California declined from 15.0 to 12.7 per 1,000 population. Over the 10-year span, Hispanics had the highest birth rate over all race/ethnicity groups, followed by Asian/ Pacific Islander. Caucasians had the lowest birth rate. In 2006, the Hispanic birth rate of 24.1 per 1,000 population was 53.0% higher than the County's birth rate in the same year.

**Figure 14. Birth Rate by Race/ Ethnicity, Sacramento County and California, 2002-2011**



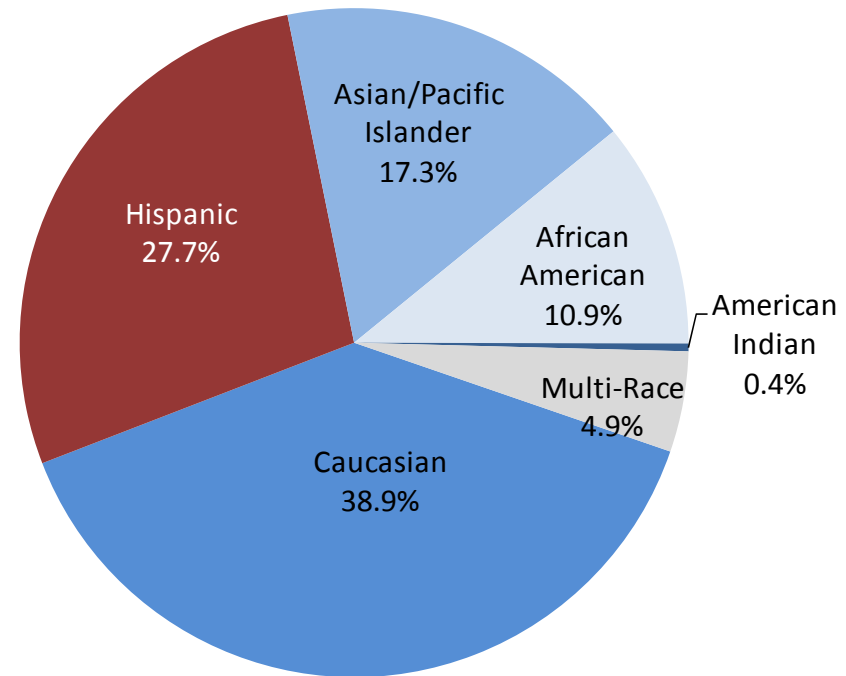
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

**Population Comparison:  
Births by Race and Ethnicity**

Figure 15 shows the distribution of births for each racial and ethnic category. In 2011, Hispanics and Asian/Pacific Islanders were over-represented in births; comprising 21.8% and 15.1% of the population, respectively, but accounting for 27.7% and 17.3% of the births, respectively. Caucasians were under-represented in births; whereas they comprised 48.4 % of the population, they accounted for 38.9% of the births.



**Figure 15. Sacramento County Live Births by Race/Ethnicity, 2011**



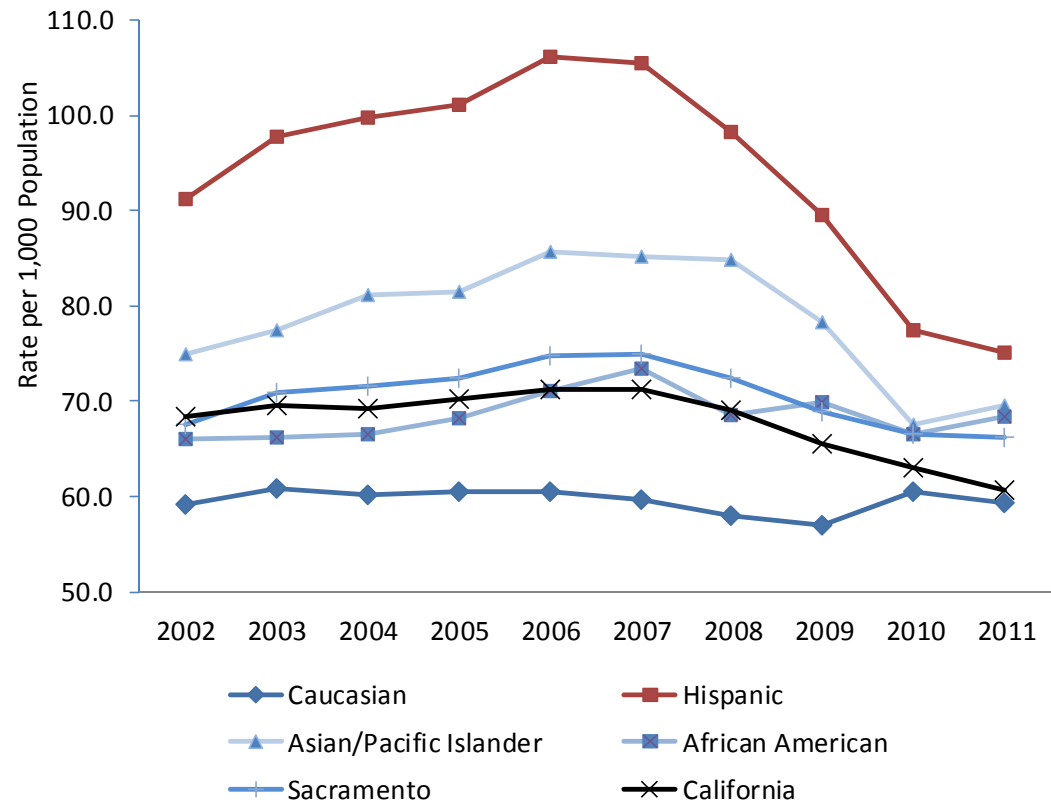
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.



## Fertility Rates

The fertility rate is calculated by dividing the number of births by the number of women ages 15-44 years old (child-bearing) and then multiplying that result by 1,000. It is defined as the number of births per 1,000 females ages 15 to 44 years. Over the past 10 years, Sacramento County had an average fertility rate of 70.6 per 1,000 females ages 15 to 44. During the 10-year period, Caucasians experienced the lowest fertility rate among all racial and ethnic groups. The fertility rate for Hispanic women was the highest, although it decreased 17.5% over the 10-year period.

**Figure 16. Fertility Rate by Race/ Ethnicity, Sacramento County and California, 2002-2011**



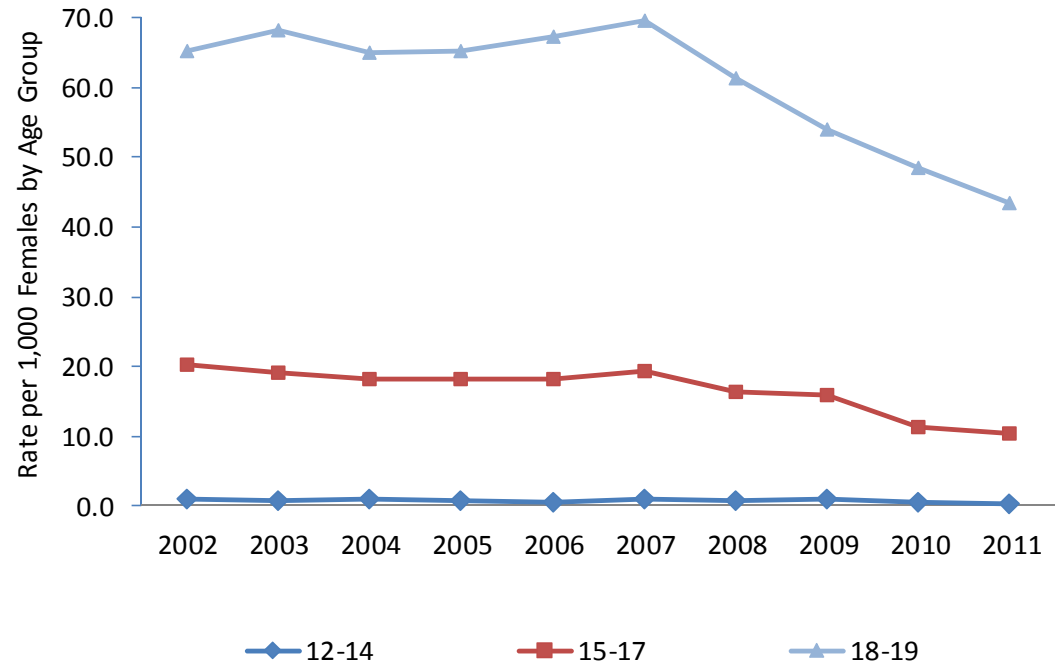
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

## Teenage Births

Adolescent pregnancy and childbearing have been associated with adverse health and social consequences. Births to mothers less than 20 years of age are presented here in three different age groups (12-14, 15-17 and 18-19).

The rates of births to females ages 15 to 17 years dropped 48.6% during the 10-year period, from 20.3 in 2002 to 10.5 per 1,000 females in 2011. The birth rate for 18-19 year-olds declined 33.5% from 65.2 in 2002 to 43.4 per 1,000 females in 2011.

**Figure 17. Teen Birth Rate by Year  
Sacramento County, 2002-2011**



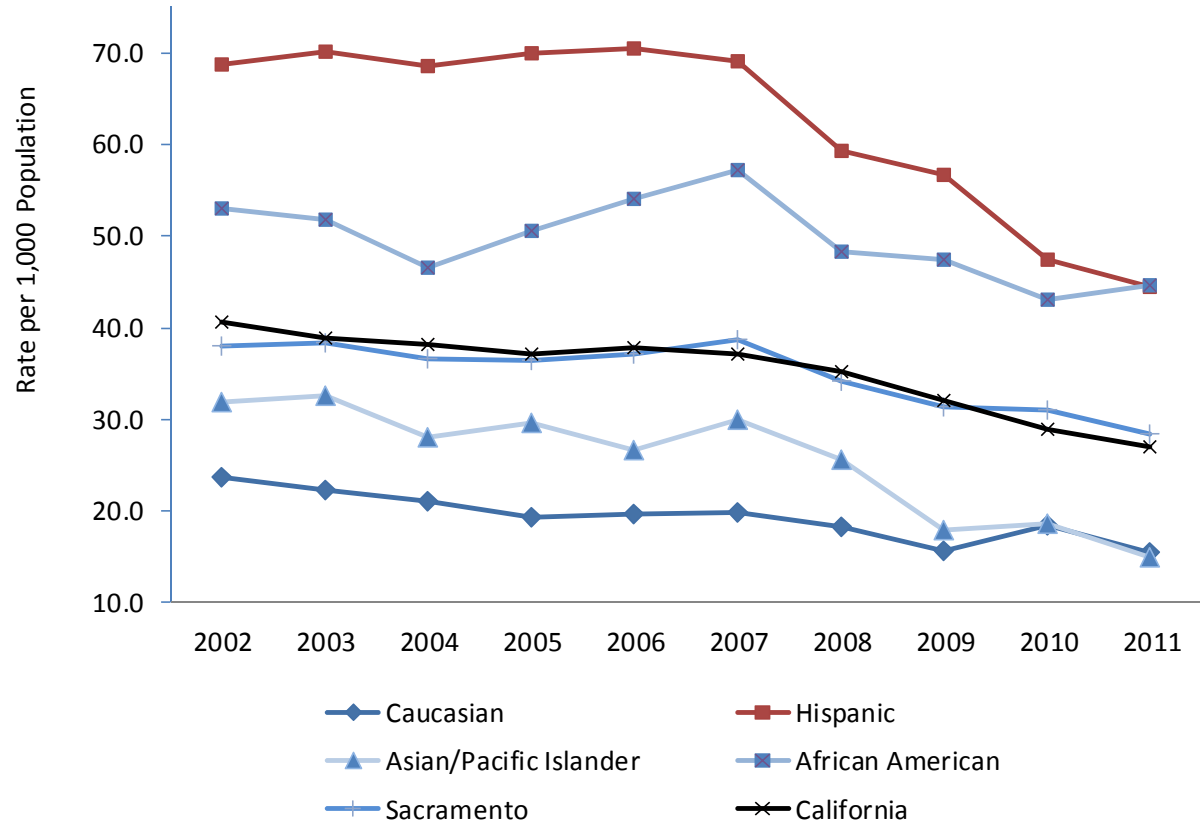
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

From 2002 to 2011, the birth rate for adolescents aged 15 to 19 years declined for all racial and ethnic groups. The overall teen birth rate declined 25.5%.

The teen birth rate for Asian/Pacific Islanders dropped 53.4%; Hispanics dropped 35.3%; Caucasians dropped 35.1% and African Americans dropped 15.6% during the 10-year period. Over the 10-year span, Hispanics had the highest teen birth rate.

In 2011, the teen birth rates for Hispanics and African Americans were more than two times higher than that of Caucasians and Asian/Pacific Islanders.

**Figure 18. Birth Rate by Race/ Ethnicity for Mothers Aged 15-19 Sacramento County and California, 2002-2011**



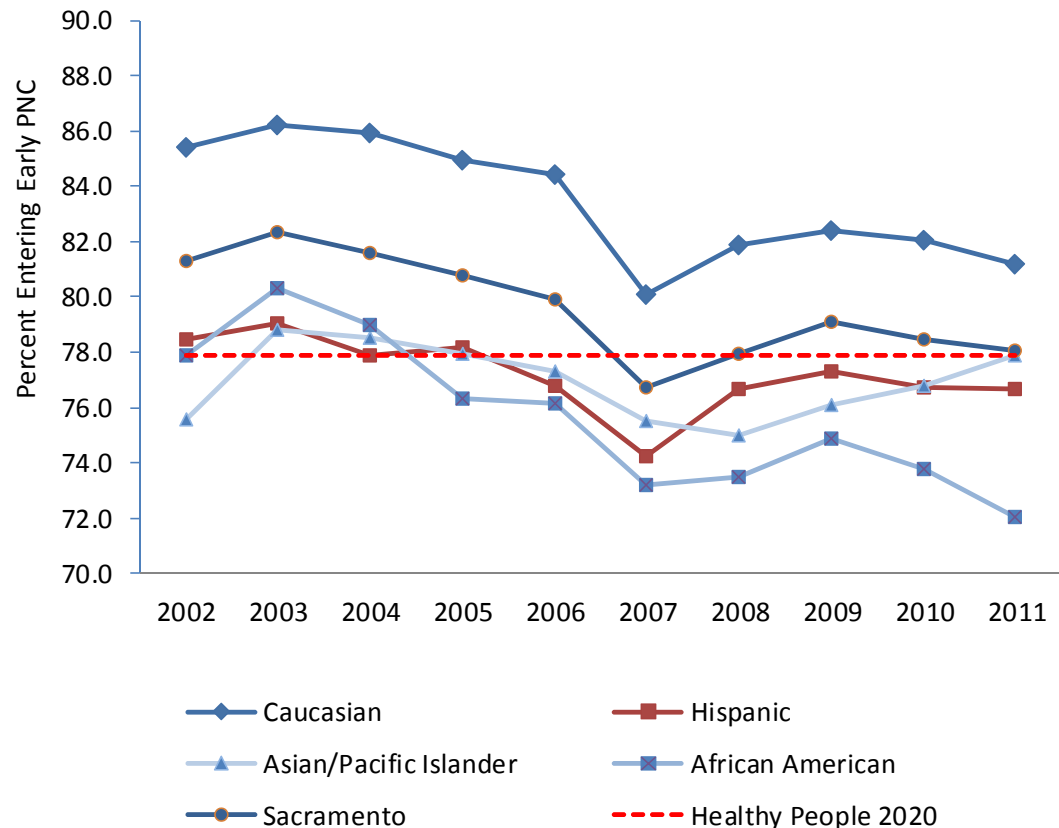
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

## Entry into Prenatal Care

Early entry into prenatal care (PNC) is vital to the health of the mother and the infant. The Healthy People 2020 Objective (U.S. Govt.) states that 77.9% of mothers should enter prenatal care during the first trimester (first three months of pregnancy). During the past 10 years, Sacramento County met the Objective except for the years 2007 and 2008.

From 2002 to 2011, the percent of mothers entering prenatal care during the first trimester decreased for all racial /ethnic groups. Caucasians had the highest percentage entering prenatal care during the first trimester, over the 10-year period.

**Figure 19, First Trimester Entry Into PNC by Race/ Ethnicity Sacramento County , 2002-2011**



Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

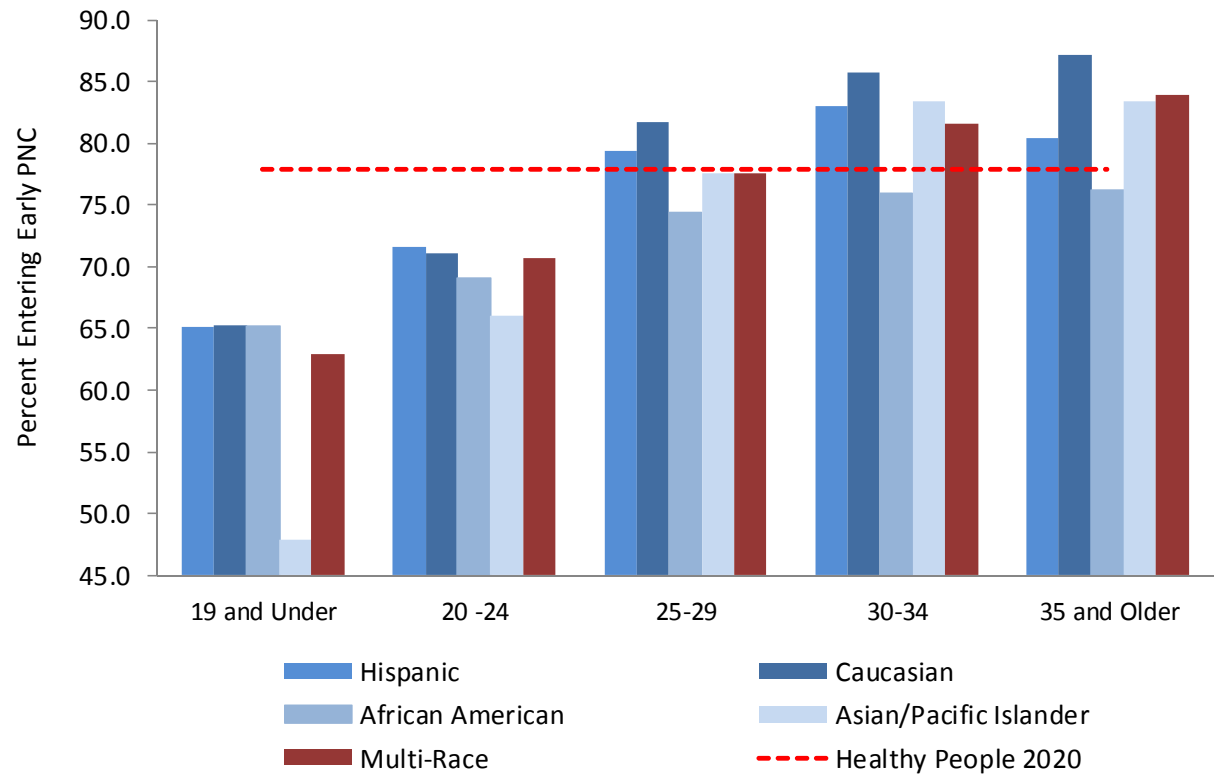
Sacramento County did not achieve the Healthy People 2020 Objective for entry into prenatal care for mothers aged less than 25 years old, regardless of race/ethnicity, in 2011.

The percentage entering early prenatal care increased with mothers' ages.

In 2011, women aged 25 or older, with the exception of African Americans, were either very close to or surpassed the Healthy People 2020 Objective for early entry into prenatal care.



**Figure 20, First Trimester Entry Into Prenatal Care by Race/Ethnicity and Age of Mother, Sacramento County, 2011**



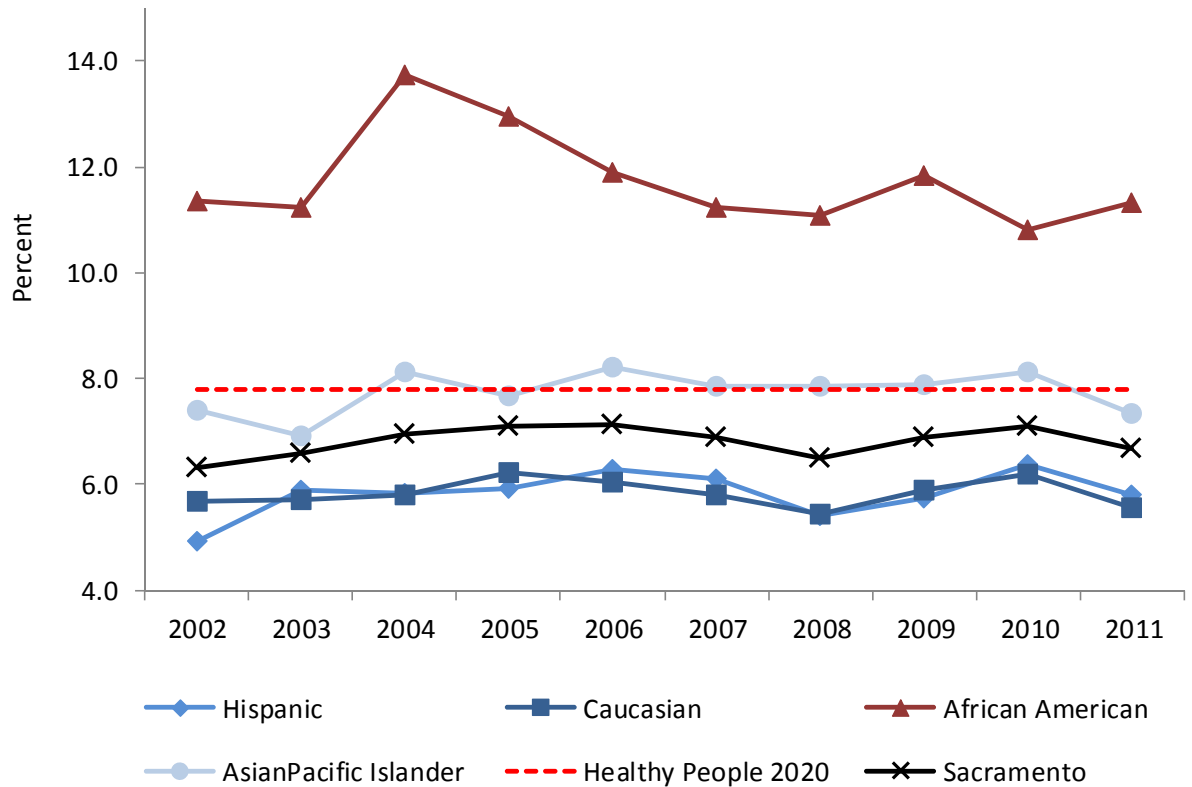
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

## Low Birth Weight

Low birth weight (less than 2500 grams or 5.5 pounds) is the risk factor most closely associated with infant death. Increases in infant birth weight can contribute substantially to reductions in the infant death rate. From 2002 to 2011, Sacramento County did not meet the Healthy People 2020 Objective of reducing births with low birth weight to less than 7.8% of all live births.

From 2002 to 2011, Caucasians and Hispanics met the Objective; while Asian/ Pacific Islanders met the Objective in four of the 10 years. African Americans had the highest percentages of births with low birth weight during the 10-year period, with an average of 11.7%. That was 50.0% higher than the Healthy People 2020 Objective.

**Figure 21. Percent of Infants Born with Low Birthweight By Race/Ethnicity, Sacramento County, 2002-2011**



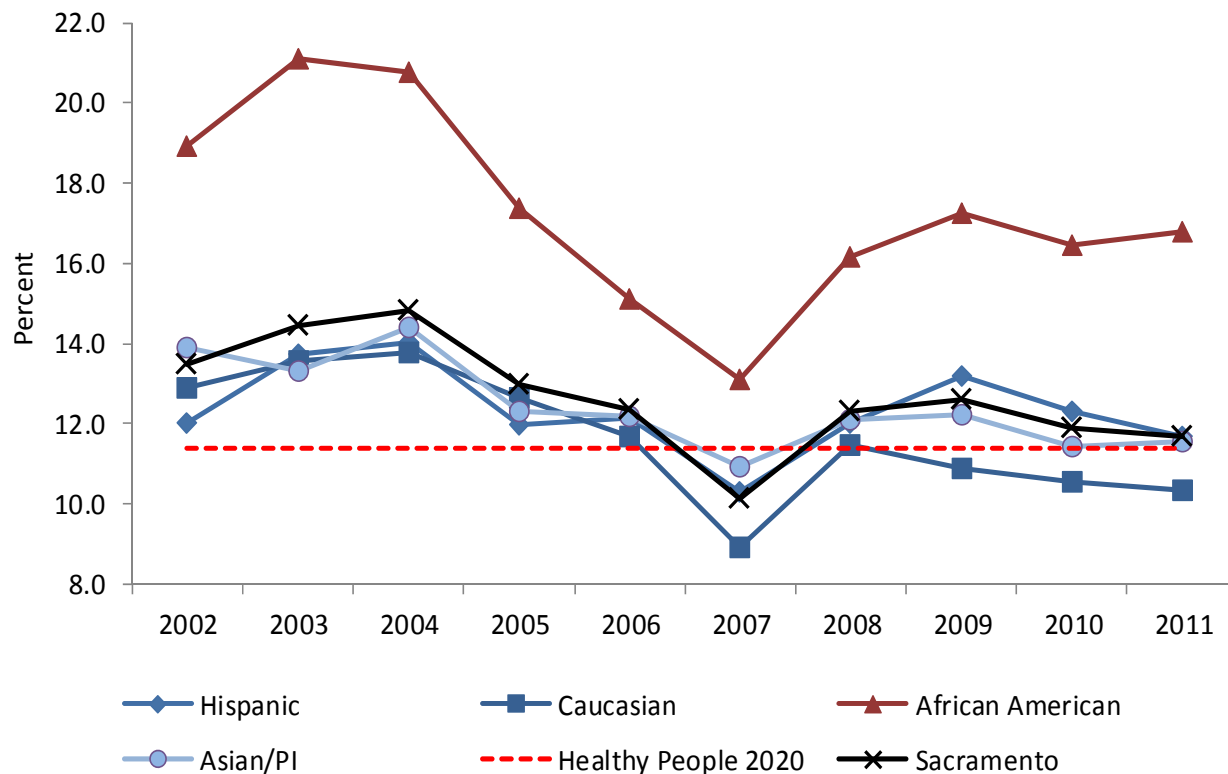
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

## Premature Births

Preterm birth is the birth of an infant prior to 37 weeks of pregnancy. Preterm-related causes of death accounted for 20.2% of all infant deaths for Sacramento County in 2011.

From 2002 to 2011, Sacramento County did not meet the Healthy People 2020 Objective of reducing preterm births to less than 11.4% of all live births except for 2007. From 2007 to 2011, Caucasians did meet the Objective. African Americans had higher premature birth rates across the 10-year period.

**Figure 22. Percent of Preterm Births By Race/Ethnicity, Sacramento County, 2002-2011**



Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.



## Payment Source for Delivery

In 2011, Medi-Cal payment accounted for 45.3% of all deliveries, and private insurance paid for 49.7% of deliveries.

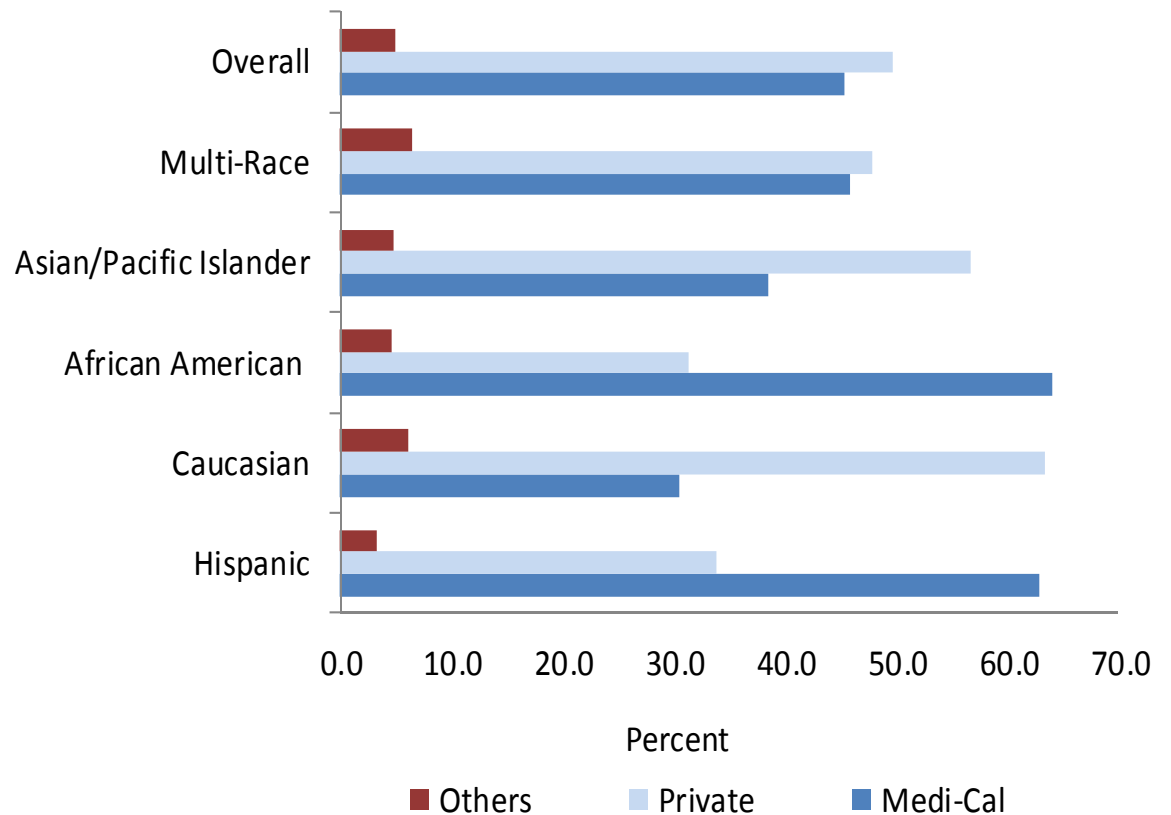
The major sources of payment for deliveries by race and ethnicity were:

African Americans – Medi-Cal (64.0%);  
 Hispanics – Medi-Cal (62.8%);  
 Caucasians – Private (63.4%);  
 Asian/Pacific Islanders – Private (56.7%).

Insurance status was reported as none or unknown for 6.4% of deliveries in Sacramento County; this was equivalent to 239 births in 2011.



**Figure 23. Percent of Births by Payment Source at Delivery and Race/Ethnicity, Sacramento County, 2011**



Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2002 through 2011.

## Most Frequently Reported Communicable Diseases

Health care providers are required by law to report certain communicable diseases to local Health Officers (California Code of Regulations Title 17). Currently, there are 84 diseases on the list. This information is critical for monitoring disease in the community, for ensuring appropriate treatments and monitoring of cases and evaluations of people who may have been exposed.

Chlamydia, gonorrhea, Hepatitis C, Hepatitis B and campylobacter were the top five communicable diseases in 2012.

**Table 3. Most Frequently Reported Communicable Diseases  
Sacramento County, 2012**

General Reportable Disease	Case	Rate*	Vector -Borne Disease	Case	Rate*
Hepatitis C, chronic	4175	290.0	West Nile Virus - Neuroinvasive	19	1.3
Coccidiomycosis	74	5.1	West Nile Virus - Fever	6	0.4
Giardia	64	4.4	Malaria	5	0.4
Tuberculosis	64	4.4	<b>Sexually Transmitted Disease</b>	<b>Case</b>	<b>Rate*</b>
Meningitis, bacterial***	16	1.1	Chlamydia	8,351	580.0
Meningitis, viral	11	0.8	Gonorrhea	2,156	149.7
Cryptosporidiosis	8	0.6	Pelvic Inflammatory Disease (PID)	151	20.6
Amebiasis	7	0.5	Syphilis - Primary & Secondary	147	10.2
Meningococcal Disease	6	0.4	AIDS	63	4.4
Legionellosis	5	0.4	HIV	187	13.0
Encephalitis, viral	4	N/A	<b>Vaccine Preventable</b>	<b>Case</b>	<b>Rate*</b>
Botulism <sup>†</sup>	2	N/A	Hepatitis B carrier	1214	84.3
Hepatitis C acute	2	N/A	Influenza - ICU	24	1.7
<b>Food-Borne Disease</b>	<b>Case</b>	<b>Rate*</b>	Pertussis <sup>‡</sup>	35	2.4
Campylobacter	209	14.5	Hepatitis A	7	0.5
Salmonella	121	8.4	Influenza - Death	4	N/A
Shigella	22	1.5	Hepatitis B acute	4	N/A
E. coli O157	15	1.0	Haemophilus Influenza**	1	N/A
E. coli HUS	1	N/A	Measles, Mumps, Rubella, Tetanus	1	N/A

Rate\*: Per 100,000 Population

<sup>†</sup> Wound and Infant Only

\*\* Invasive under 15 years of age

\*\*\* Other than *N. meningitidis*

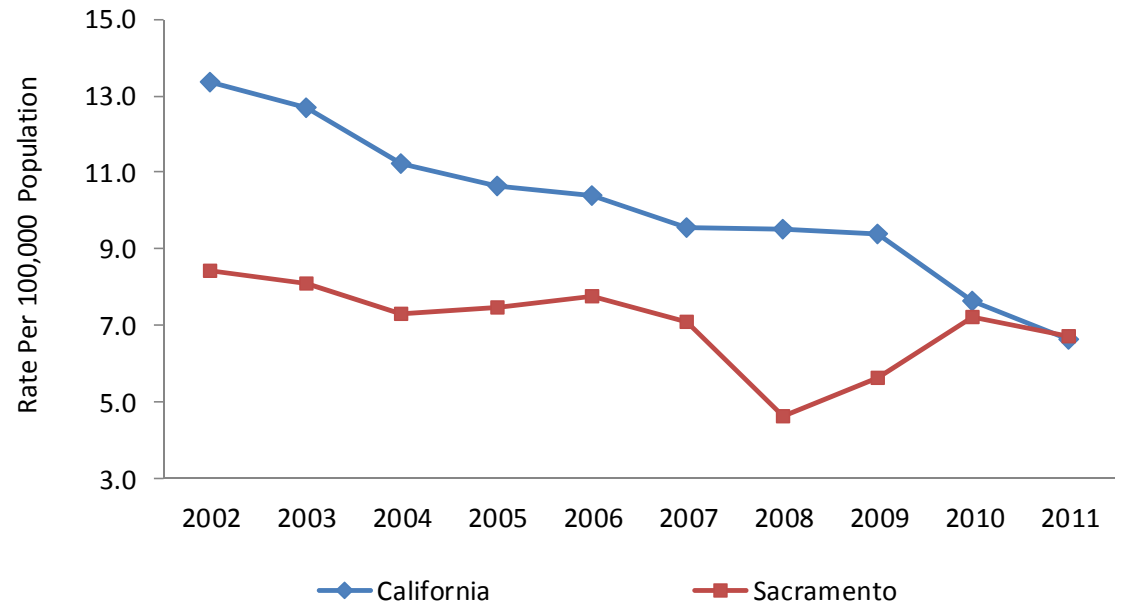
<sup>‡</sup> Data Source: State of California, Department of Public Health Immunization Branch

Data Source: California Reportable Disease Information Exchange, Confirmed Cases by Episode Date

## AIDS

The reported incidence of AIDS in the Sacramento County declined 20.2% from 8.4 per 100,000 population in 2002 to 6.7 per 100,000 population in 2011 (Figure 24). The incidence of AIDS in California declined 50.2% for the time period. The declines have been attributed to anti-retroviral therapy, which can significantly reduce mortality and prolong the lives of residents living with HIV. In 2012, AIDS and HIV incidence rates in Sacramento ranked in the top 10 of counties in California.

**Figure 24. AIDS Incidence Rate, Sacramento County vs. California. 2002-2011**

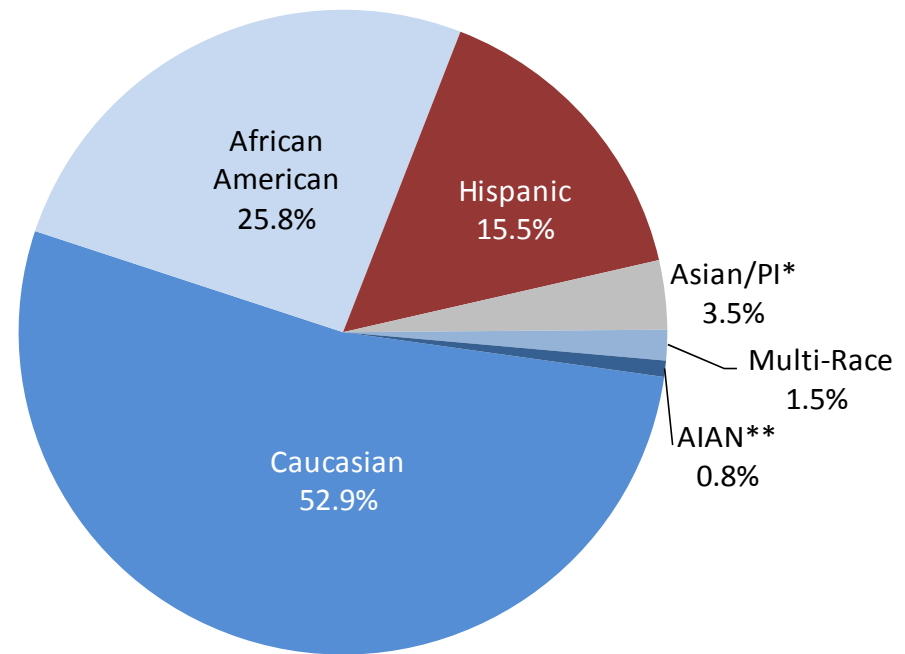


Data Source: State of California, Department of Public Health, office of AIDS

Males accounted for 80.3% of AIDS cases diagnosed from 2002-2011. Men who have sex with men (MSM) constituted 48.9% of AIDS cases and intravenous drug users (IDU) constituted 11.1% of cases. Due to new drug treatments and better medical management of AIDS cases, the number of people living with AIDS (PLWA) continues to steadily increase. In 2000, there were 915 PLWA in Sacramento County compared to 1,862 PLWA in 2011. It was estimated that in 2011, there were 1,309 people living with HIV that did not progress to AIDS.

AIDS disproportionately impacts African Americans. African Americans constituted 10.6 % of the population and 25.8 % of AIDS cases (Figure 25). However, Caucasians still are the major race affected at 52.9% of the total.

**Figure 25. AIDS Cases by Race/Ethnicity Sacramento County 2002-2011**



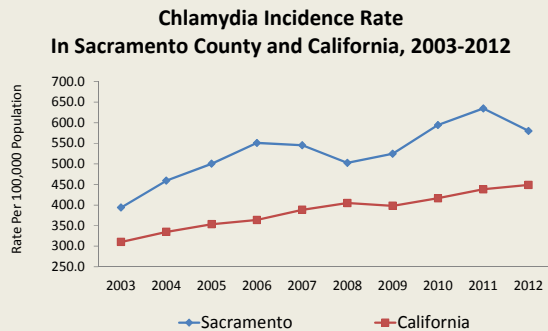
\*Asian/P.I: Asian and Pacific Islanders.

\*\*AIAN: American Indian and Alaskan Native.

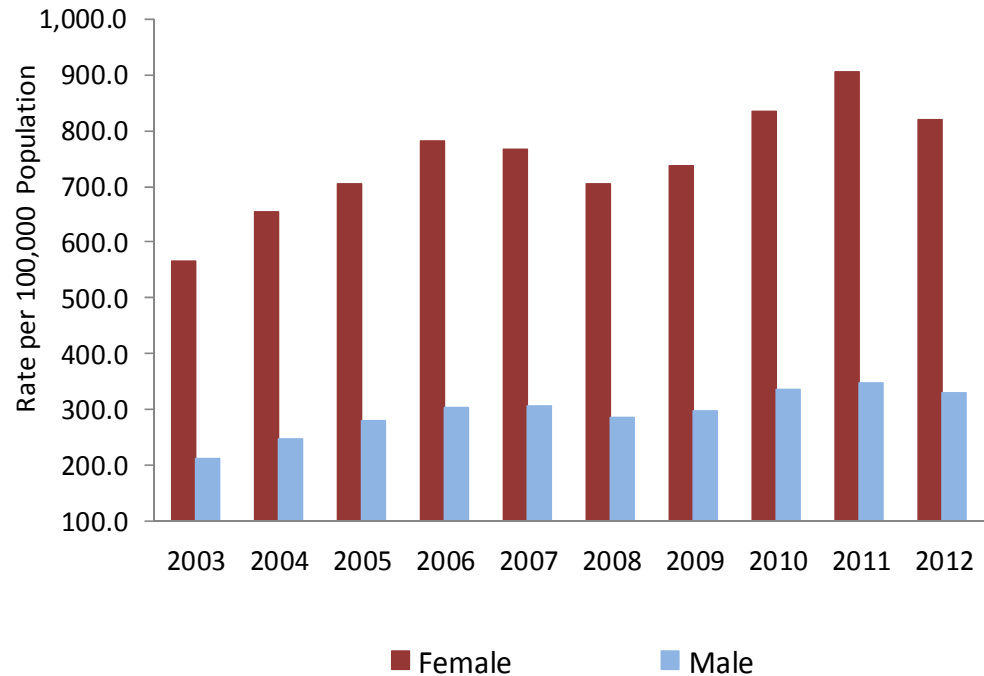
Data Source: State of California, Department of Public Health, office of AIDS

## Chlamydia

Chlamydia infections were the most commonly reported communicable disease. Chlamydia rates increased 43.4%, from 404.6 in 2003 to 580.0 per 100,000 population in 2012. The Chlamydia incidence rate was 29.2% higher than the statewide rate in 2012 (See the insert). Sacramento County had the fourth highest incidence rate in 2012, in the State. Females had higher incidence rate than males (Figure 26).



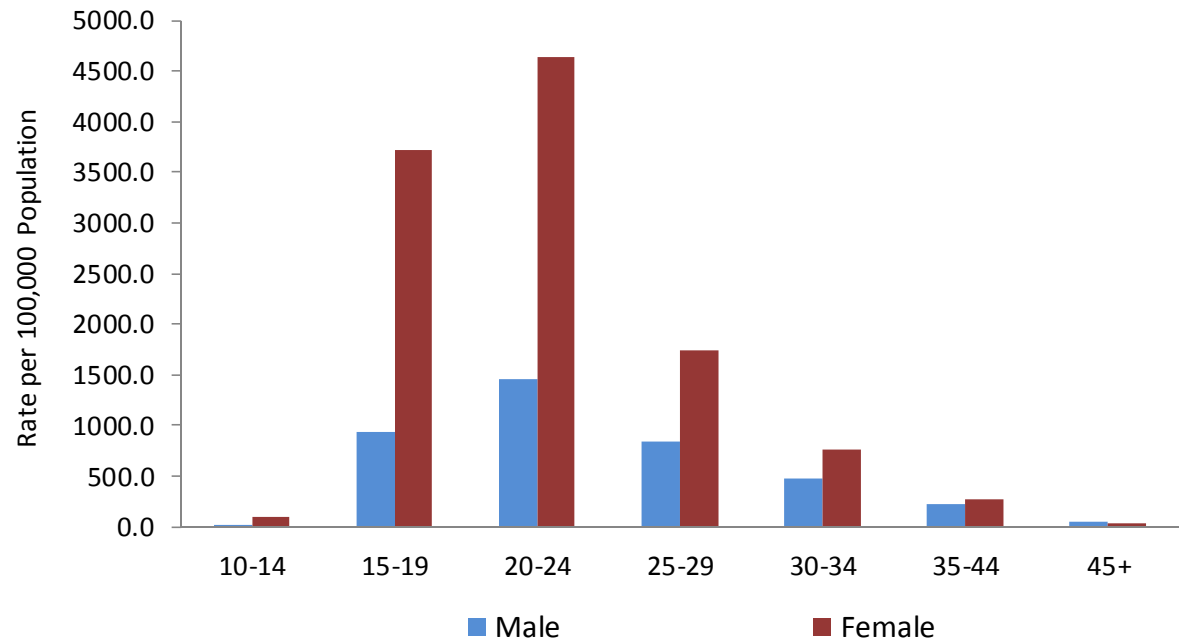
**Figure 26, Chlamydia Infection Incidence Rates by Gender, Sacramento County, 2003-2012**



Data Source: State of California, Department of Public Health, STD Branch

In 2012, 70.0% of Chlamydia cases were females. Males may not experience symptoms and therefore do not get tested and reported. Among females, 31.9% of cases were amongst adolescents aged 15-19 years, while the age group of 20-24 year-olds constituted 39.1% of cases.

**Figure 27. Chlamydia Infection Incidence Rate by Age and Gender, Sacramento County, 2012**

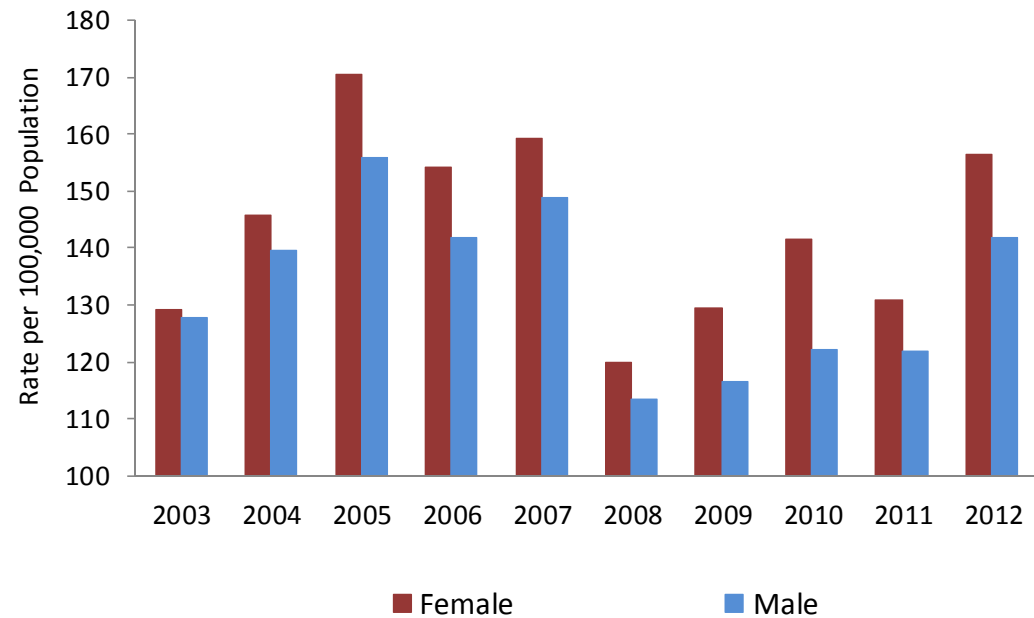


Data Source: State of California, Department of Public Health, STD Branch

## Gonorrhea

Sacramento County reported a rate of 149.7 cases per 100,000 population in 2012, which is the third highest in the State of California behind San Francisco and Fresno Counties. The incidence rate of gonorrhea in Sacramento County is consistently (2003-2012) above that reported for California.

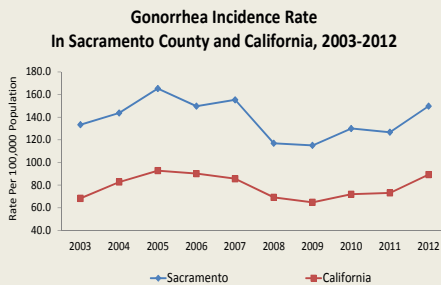
**Figure 28, Gonorrhea Infection Incidence Rates by Gender, Sacramento County, 2003-2012**



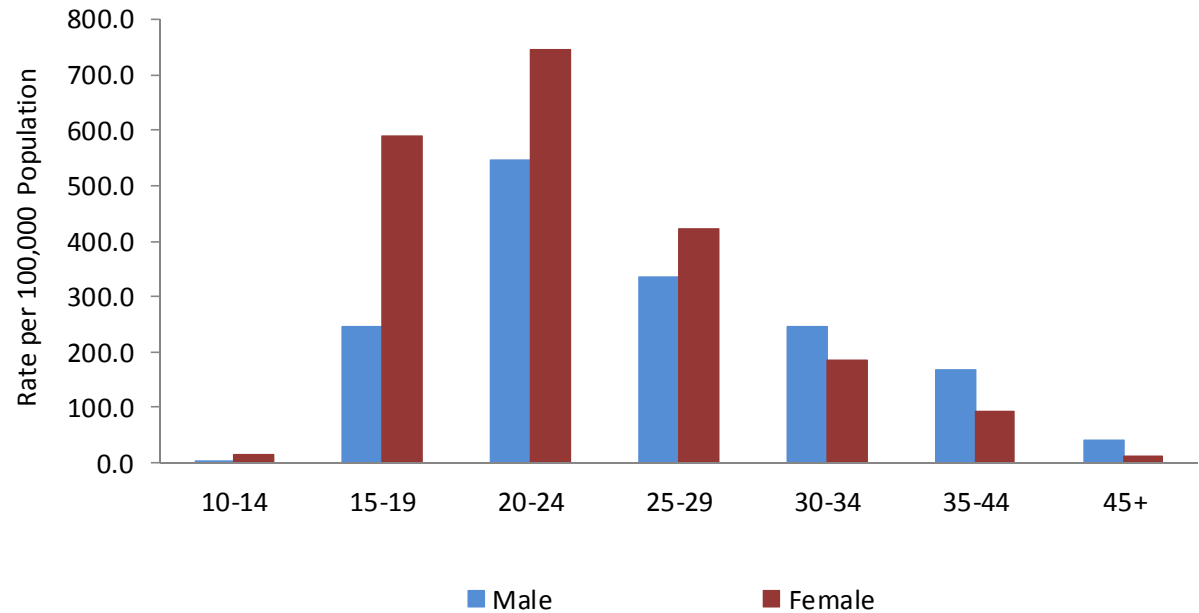
Data Source: State of California, Department of Public Health, STD Branch

In 2012, 53.2% of Gonorrhea cases were females. Among the females, 33.1% were 20-24 years old, followed by those 15-19 years old (26.5%).

Among males, 28.6% were aged 20-24 years, followed by those aged 25-29 years (18.0%). Both males and females experienced increases in each age group in 2012 compared to 2011 and 2010.



**Figure 29. Gonorrhea Infection Incidence Rate by Age and Gender, Sacramento County 2012**



Data Source: State of California, Department of Public Health, STD Branch

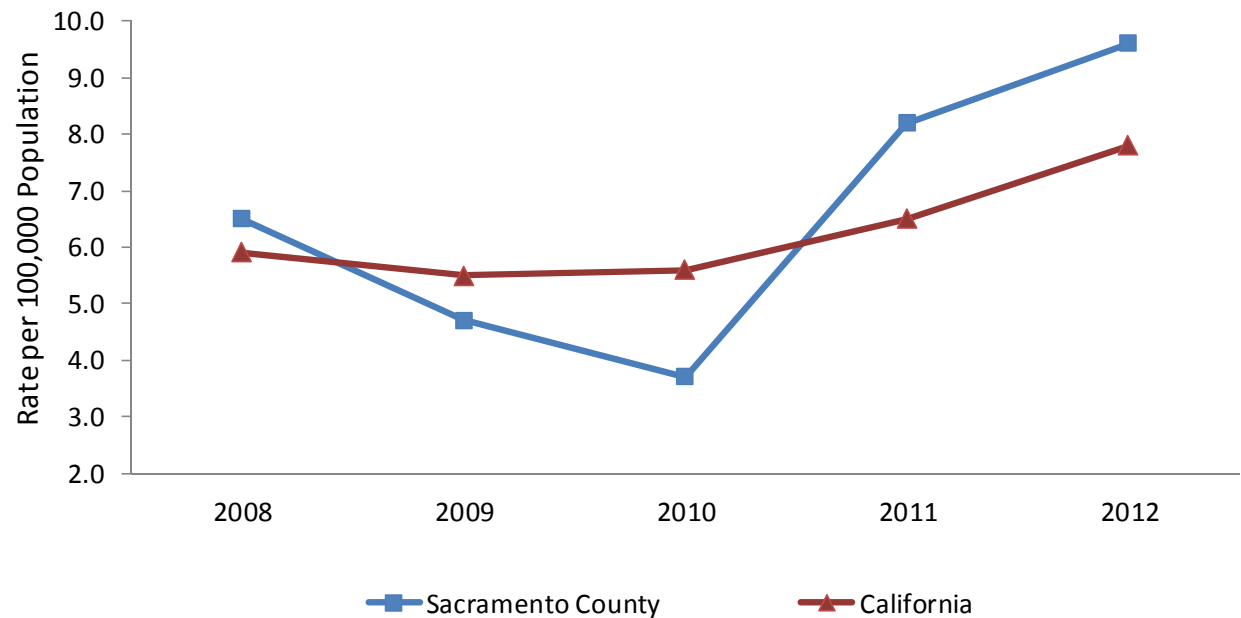


## Syphilis

The State of California continues to experience an increase in primary and secondary (P&S) syphilis cases. The number of P&S syphilis cases in Sacramento County increased from 13 cases in 2003 to 138 in 2012.

Figure 30 illustrates data comparing Sacramento County's rate to the statewide rate of P&S Syphilis. Sacramento County has surpassed the Statewide rate in recent years (2011 and 2012) with a rate of 9.6 per 100,000 population in 2012 compared to the Statewide rate of 7.8 per 100,000 population.

**Figure 30. Primary and Secondary Syphilis Rate by Year, Sacramento County vs. California, 2008-2012**



Source: California Department of Public Health, STD Control Branch (data reported through 08/19/2013)

## Tuberculosis

The Healthy People 2020 Objective for tuberculosis (TB) is 1.0 new case per 100,000 population. During the ten-year period, Sacramento County did not meet this Objective.

Table 4 compares tuberculosis incidence rates for Sacramento County with Statewide incidence rates for 2003-2012. While statewide incidence rates have steadily declined, rates in Sacramento County have fluctuated due to identification of outbreaks. Statewide and Sacramento County's incidence rates have declined since 2003. Table 4 shows that the total number of cases in 2003 was more than double that in 2012.

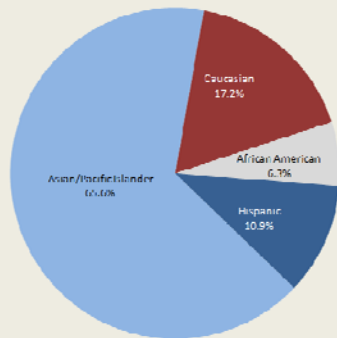
**Table 4. Number of Tuberculosis Cases and Rates  
Sacramento County, 2003-2012**

Year	Total Count	Male Count	Female Count	Rate Sacramento	Rate California
2003	151	84	67	11.4	9.1
2004	157	94	63	11.7	8.4
2005	142	79	63	10.5	8.1
2006	97	51	46	7.1	7.7
2007	109	60	49	7.9	7.5
2008	110	67	43	7.9	7.3
2009	98	56	42	6.9	6.7
2010	64	36	28	4.5	6.2
2011	75	44	31	5.2	6.2
2012	63	38	25	4.4	5.8

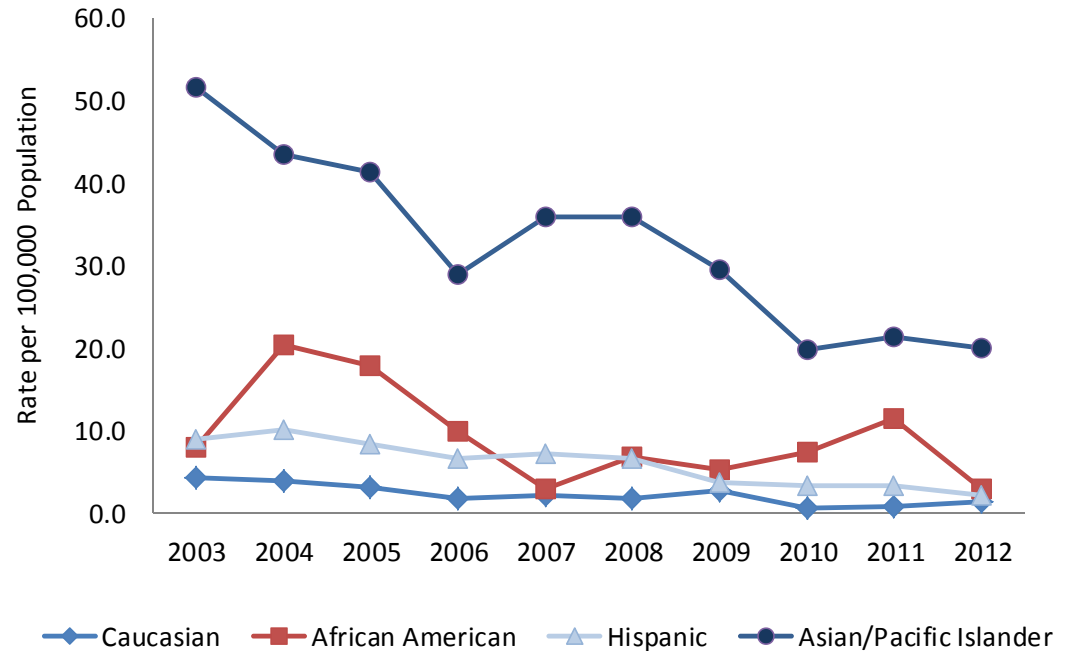
Source: California Department of Public Health, Center for Infectious Diseases  
Division of Communicable Disease Control, Tuberculosis Control Branch

In 2012, Asian/Pacific Islanders made up the highest proportion of TB cases in the County (Figure 31). TB incidence rates declined among all ethnic groups, but the rates among Asians and Pacific Islanders remained higher than the rates for all other race/ethnicity groups over the 10-year period (see following graph).

**Tuberculosis Cases by Race/Ethnicity  
Sacramento County, 2012**



**Figure 31. Tuberculosis Incidence Rates by Race/Ethnicity Sacramento County, 2003-2012**

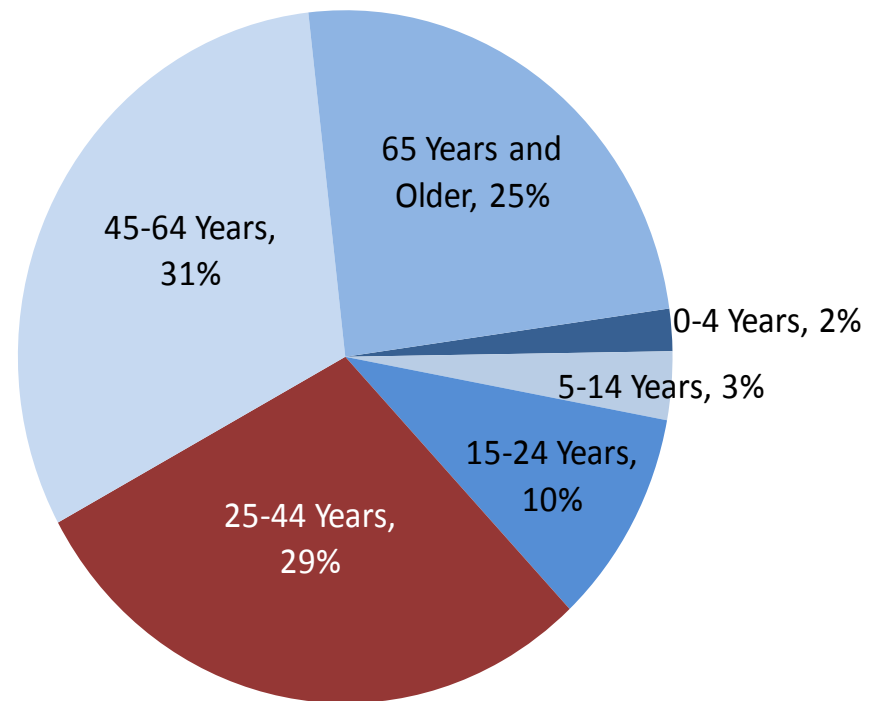


Source: California Department of Public Health, Center for Infectious Diseases  
Division of Communicable Disease Control, Tuberculosis Control Branch

The greatest number of TB cases in 2003 to 2012 occurred amongst individuals over 45 years of age. TB can affect older people adversely if their immune systems become compromised, giving dormant bacteria a chance to cause active disease.

The proportion of TB cases occurring among persons who are homeless in the County fluctuates from year to year. In general, it has decreased from a high of 13% of cases in 2005, corresponding to an outbreak during that time, to 7% of cases in 2012. Over 76% of homeless cases were males and 23.2% were females over the 10-year period. The majority of homeless TB cases in the County occurred among Caucasians (48.5%), followed by African Americans (32.3%) and Asian/Pacific Islanders (14.1%).

**Figure 32. Tuberculosis Cases by Age Group, Sacramento County 2003-2012**



Source: California Department of Public Health, Center for Infectious Diseases Division of Communicable Disease Control, Tuberculosis Control Branch

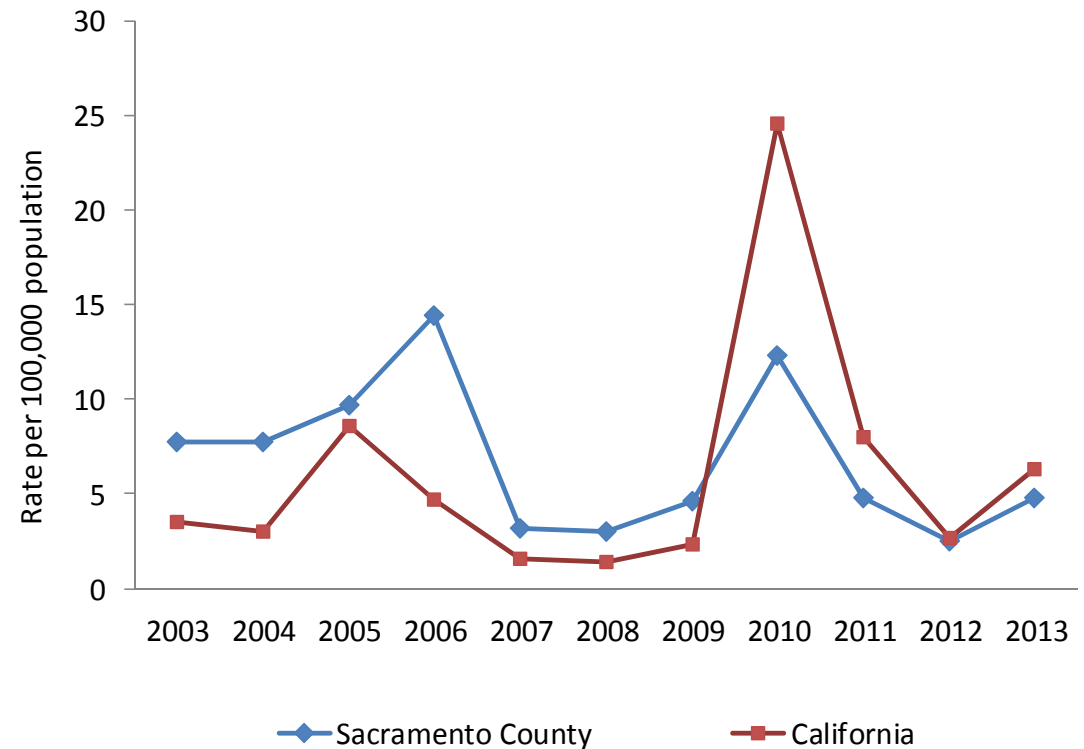
## Pertussis

Pertussis is a cyclical disease with outbreaks occurring every three to four years. The County's pertussis incidence rates exceeded the statewide rates from 2003 to 2009. Since 2010, the incidence rates have been lower than the State's (Figure 33).

Sacramento County experienced a dramatic increase of pertussis cases in 2006 and 2010. There were 206 reported cases in 2006 with an incidence rate of 14.4 per 100,000 population and 175 reported in 2010 with a lower incidence rate of 12.3 per 100,000 population.

From 2003-2013, a total of 1,051 pertussis cases was reported in Sacramento County.

**Figure 33. Pertussis Incidence Rates, Sacramento County vs. California, 2003-2013**



Data Source: California Department of Public Health

## Chronic Diseases

Asthma, diabetes, overweight, cancer, heart disease, hypertension and health status estimates presented in this report are based on the 2001-2011 California Health Interview Survey (CHIS) for Sacramento County and the State of California, and OSHPD (Office of Statewide Health & Planning Department) hospital-discharge data.

According to hospital discharge data, the top chronic diseases resulting in inpatient care in Sacramento County were mental illness, heart disease (including cerebrovascular disease), cancer, chronic lower respiratory disease and diabetes.



**Table 5. OSHPD Discharge Data By selected Chronic Diseases, Sacramento County, 2011**

Disease	Visits
<b>Mental disorder</b>	10,497
<b>Heart disease</b>	9,868
<b>Cancer</b>	3,525
<b>Cerebrovascular disease</b>	3,053
<b>Chronic lower respiratory disease</b>	2,289
<b>Pneumonia &amp; influenza</b>	2,195
<b>Diabetes</b>	1,821
<b>Nephritis</b>	887
<b>Hypertension</b>	454
<b>Chronic liver &amp; cirrhosis</b>	303
<b>Atherosclerosis</b>	283
<b>Alzheimer</b>	52
<b>Aortic aneurysm</b>	38
<b>Parkinson</b>	23

Data Source: Office of Statewide Health & Planning Department (OSHPD), hospital-discharge data.

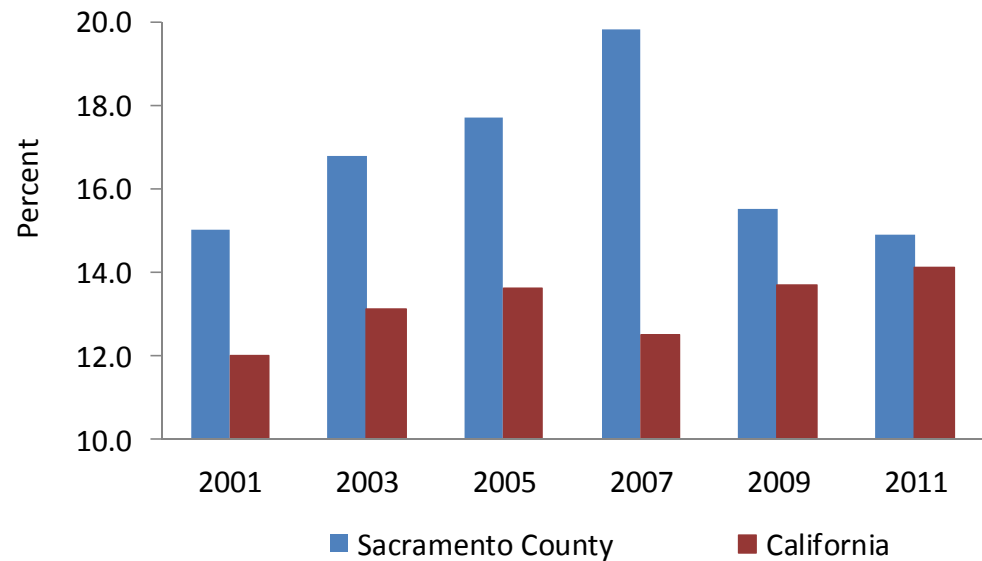
## Asthma

### Lifetime Asthma Prevalence

In 2011, 14.9%, (an estimated 209,000) of Sacramento County residents of all ages were diagnosed with asthma at some point in their lives (lifetime asthma prevalence). Compared to California, the lifetime asthma prevalence for residents in Sacramento County was higher across all years (Figure 34). In 2011, Sacramento County had the lowest asthma prevalence (14.9%) since 2001.

In 2011, the lifetime asthma prevalence was only 5.7% higher in Sacramento County than the State, the smallest difference over the period.

**Figure 34. Lifetime Asthma Prevalence, Sacramento County vs. California, 2001-2011**

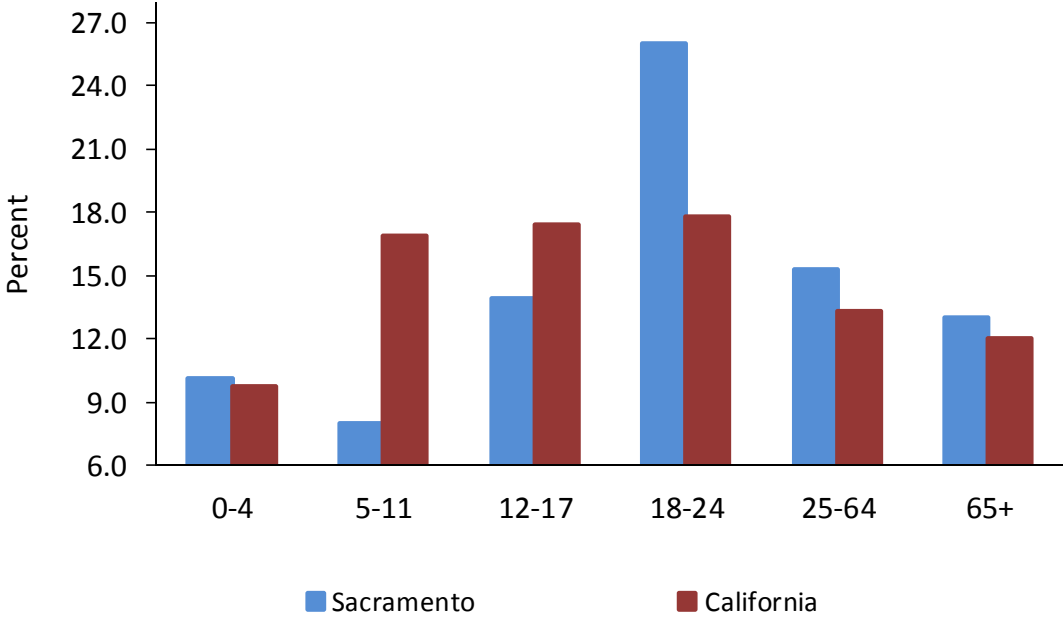


Data Source: California Health Interview Survey 2001-2011 (CHIS)

**Asthma Prevalence by Age**

Figure 35 shows the distribution of asthma prevalence by age group. In Sacramento County, young adults aged 18-24 years of age had the highest asthma prevalence (26.0 %), followed by residents 25-64 years of age (15.3%).

**Figure 35. Lifetime Asthma Prevalence by Age Group**



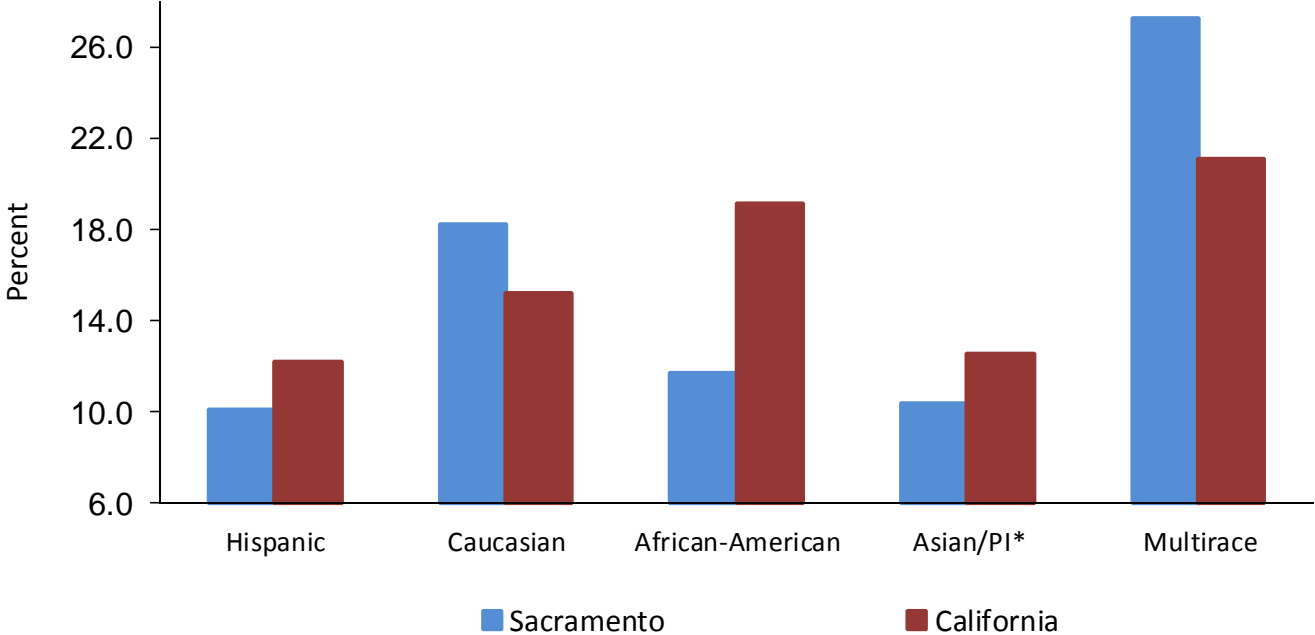
Data Source: California Health Interview Survey 2001-2011 (CHIS)



**Asthma Prevalence by Race/Ethnic Group**

Asthma prevalence varied with different racial and ethnic groups in Sacramento County in 2011. The rate among the multi-racial group (26%) was higher than for the other race/ethnicities followed by Caucasians at 18.2%.

**Figure 36. Asthma Prevalence by Race/Ethnicity Sacramento County vs. California, 2011**

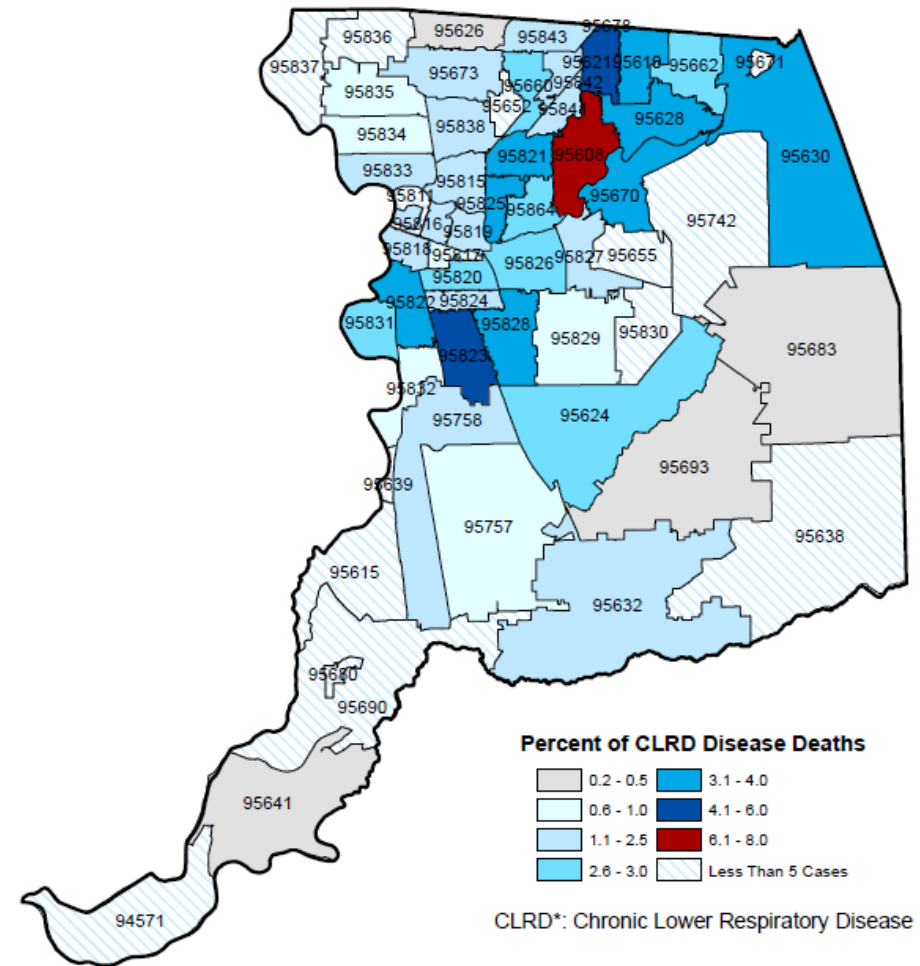


Asian/PI\*: Asian Pacific Islander  
Data Source: California Health Interview Survey 2001-2011 (CHIS)

## Chronic Lower Respiratory Disease

Chronic Lower Respiratory Diseases (CLRD) is a diverse group of disorders involving impairment of lung function. CLRD comprises three major diseases: chronic bronchitis, emphysema and asthma. Conditions are characterized by shortness of breath due to airway obstruction. Mortality is high in older age groups, especially greater than age 65. Deaths were distributed primarily in the following zip Codes: 95608 (Carmichael), 95823 (Sacramento), and 95621(Citrus Heights), 95828 (Florin) and 95630 (Folsom/Clarksville).

**Map 2. Percent of CLRD\* Deaths by Zip Code Sacramento County, 2007-2011**



**Cancer**

Cancer was one of the leading causes of death in Sacramento County in 2011. Compared with the State, Sacramento County had a higher cancer incidence rate and cancer mortality rate for the most common cancer sites, listed in Table 6.

Although breast cancer had a higher incidence rate, lung cancer had a higher mortality rate (Table 6).

See the page 69 on definitions for explanation of age-adjusted rates.

**Table 6. Most Common Cancer in Sacramento County and California, 2011**

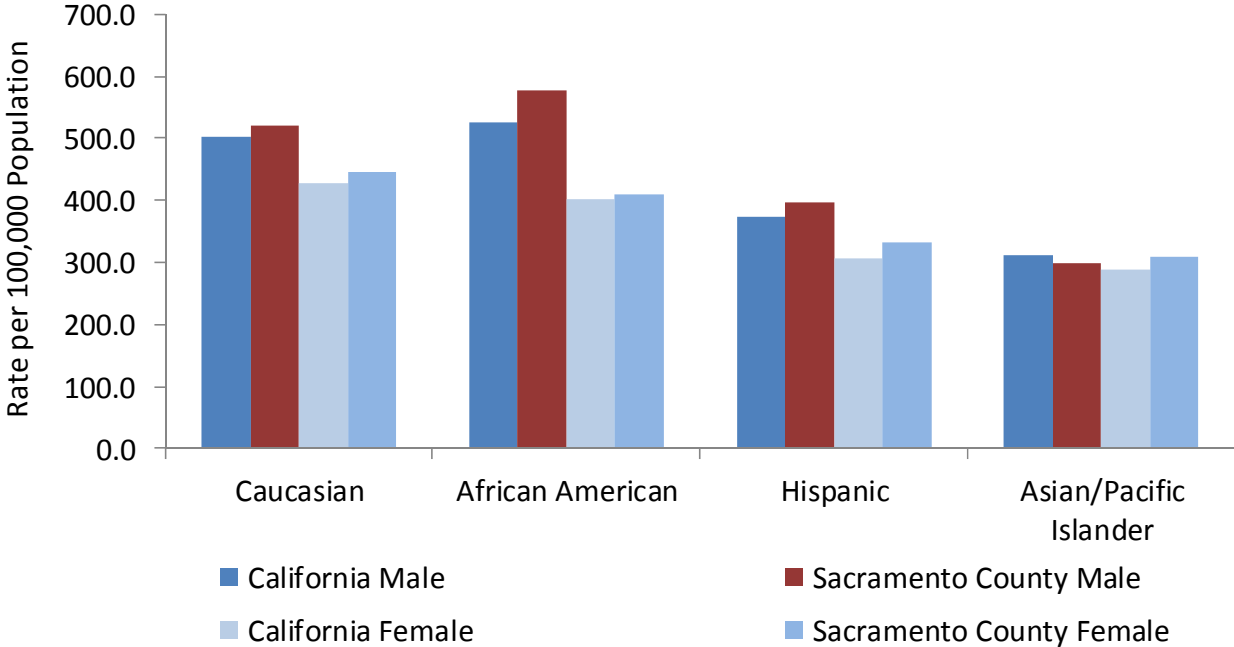
Cancer	Sacramento		Age-Adjusted Incidence Rates		Age-Adjusted Mortality Rates	
	Incidence	Deaths	Sacramento	California	Sacramento	California
All Sites	6,433	2406	447.4	412.7	170.6	151.3
Lung and Bronchus	786	592	56.3	44.7	42.8	34.7
Colon and Rectum	597	229	42.5	37.8	16.4	14.0
Breast	1,032	177	71.4	64.9	12.4	11.3
Prostate	900	123	135.9	124.6	22.1	20.5
Leukemia	166	102	11.6	11.8	7.2	6.4

All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population.  
Data Source: California Cancer Registry

**Cancer Incidence Rates by Race/Ethnicity and Gender**

The rates were higher for males than for females, except among the Asian/Pacific Islanders. This disparity was greatest for African Americans. Overall, Asian/Pacific Islanders had the lowest cancer incidence rates among all race/ethnicity groups.

**Figure 37. Age-Adjusted Incidence Rate by Race/Ethnicity and Gender Sacramento County vs. California, 2011, All Sites Combined**



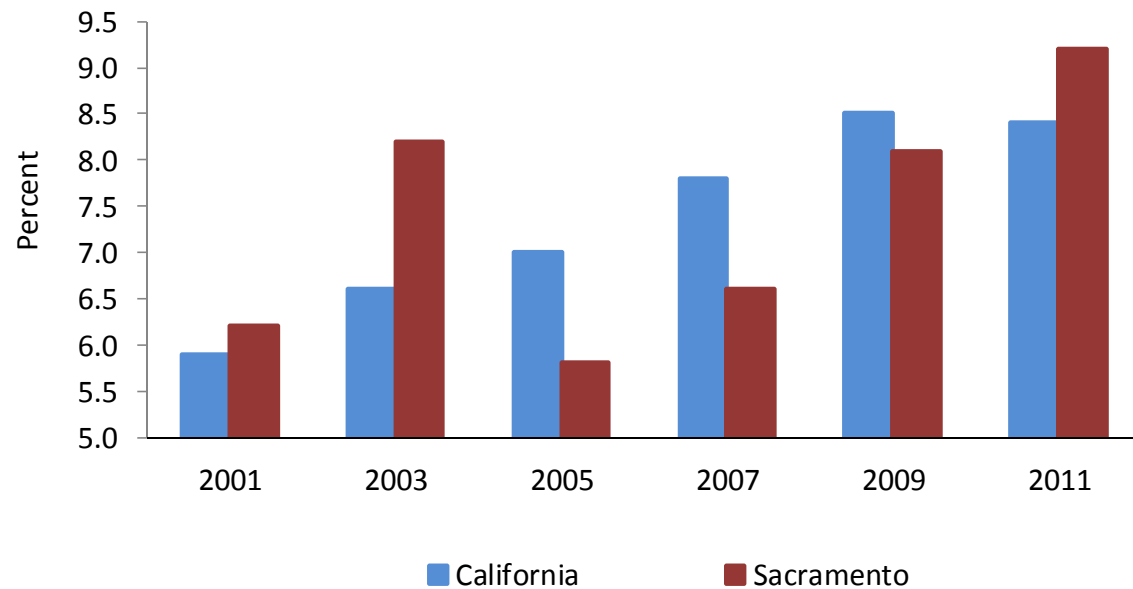
Rates are shown as the number of new cases or deaths per 100,000 persons. All rates are age-adjusted to the 2000 United States Standard Population. Rate based on fewer than 15 cases are not shown.

Data Source: California Department of Health, Cancer registry.

### Diabetes

In 2011, it was estimated that 97,000 adults in Sacramento County had been diagnosed with diabetes at some point in their lives. The prevalence of diabetes in Sacramento County was 9.2%. Compared to the State, the County's diabetes rate was higher in 2011, but lower in 2005 to 2009. In 2011, it is estimated that there were 55,000 adult males (10.7%) and 43,000 females (7.8%) diagnosed with diabetes. Among those diagnosed with diabetes in 2011, 17.1% had Type I diabetes, 78.5% had Type II diabetes.

**Figure 38. Diabetes Rate by Year, Sacramento County vs. California, 2001-2011**



Data Source: California Health Interview Survey 2001-2011 (CHIS)

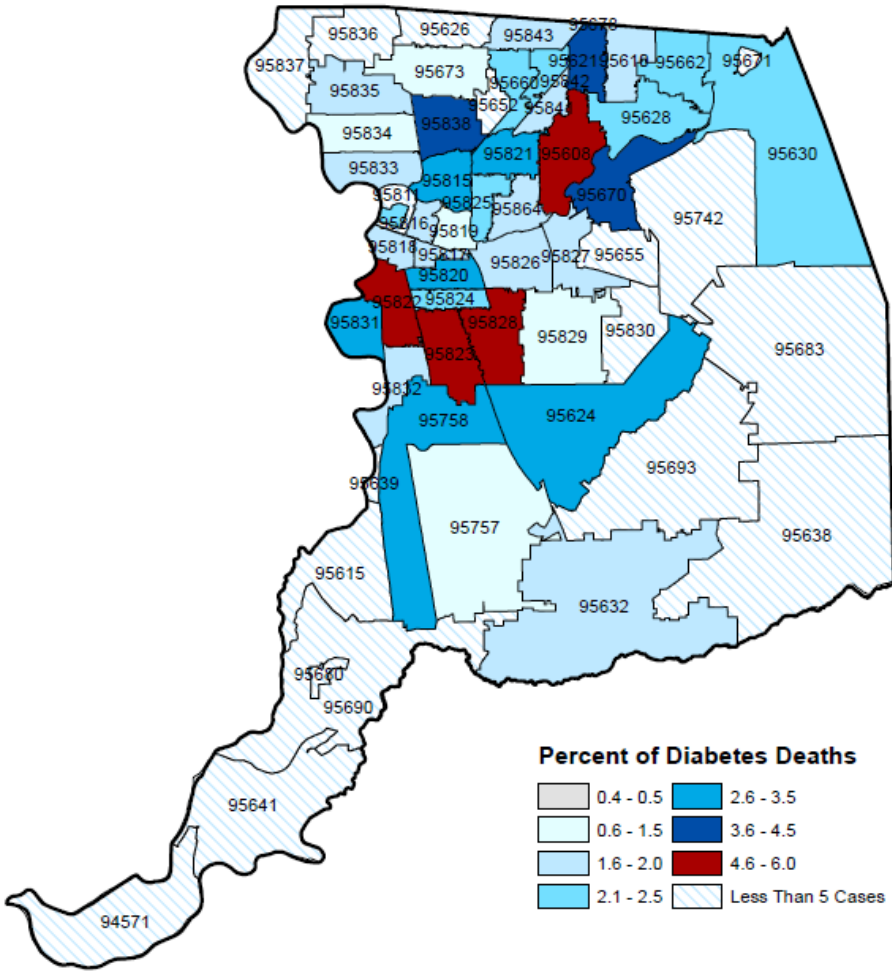
Diabetes Mortality

Diabetes was the seventh leading cause of death in Sacramento County in 2011. The death rate was more than 5 times as high for persons aged 65 and older group (123.0 per 100,000) compared to aged 45-64 years old groups (23.7 per 100,000). Mortality was related primarily to heart disease complications. The risk for stroke and end-stage renal disease is also higher for persons with diabetes.

Diabetes deaths were primarily distributed in the following zip codes: 95608 (Carmichael), 95823 (Sacramento), 95628 (Florin), and 95822 (Sacramento). See map 3.

Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2007 through 2011.

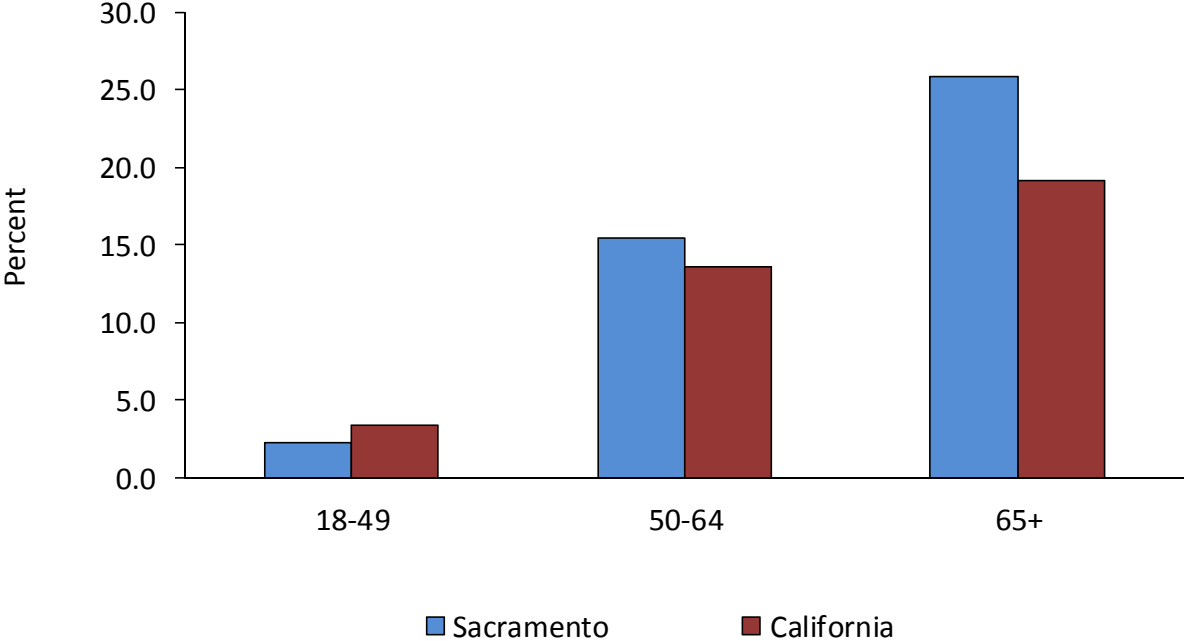
Map 3. Percent of Diabetes Deaths by Zip Code Sacramento County, 2007-2011



Diabetes Prevalence by Age

Individuals age 65 years and older had the highest prevalence of Type II diabetes (25.0 %), followed by individuals age 50-64 years (15.4%). In 2011, the diabetes rate in Sacramento was higher than the State's for individuals 50 and older (Figure 39). Overweight and obesity are major risk factors for Type II diabetes.

Figure 39. Prevalence of Diabetes by Age Group, Sacramento County vs. California, 2011



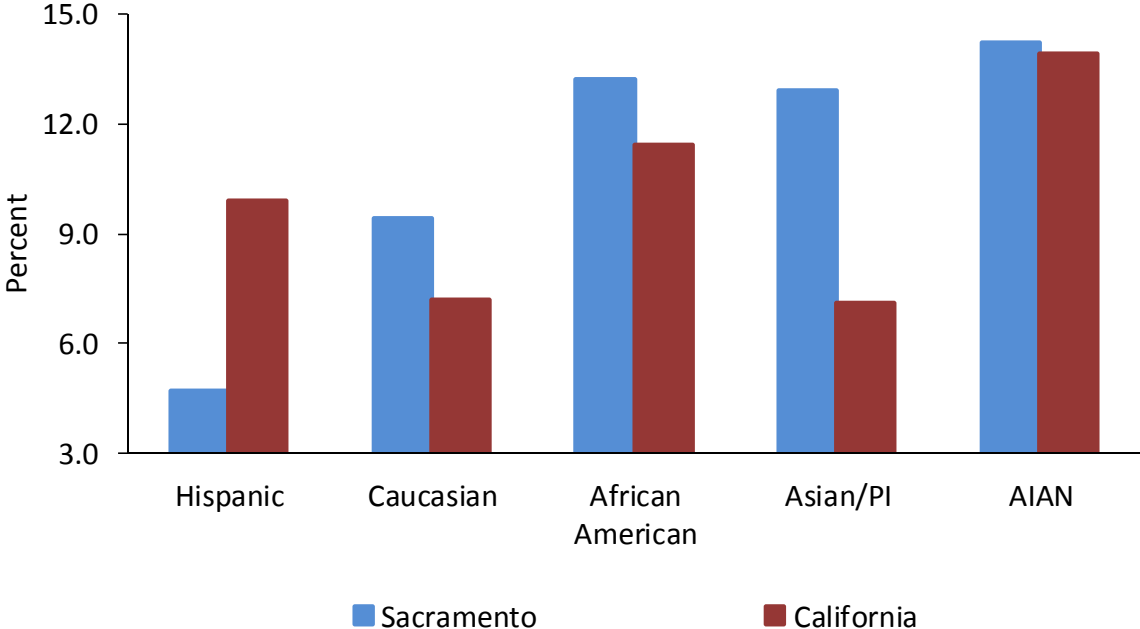
Data Source: California Health Interview Survey 2001-2011 (CHIS)

**Prevalence of Diabetes by Race/Ethnicity**

Diabetes prevalence varied with different racial and ethnic groups in Sacramento County in 2011. American Indian and Alaskan Natives had the highest diabetes prevalence (14.2%), followed by African Americans (13.2%) and Asian/Pacific Islanders (12.9%).

The County had higher rates than the State for all groups except for Hispanic.

**Figure 40. Diabetes Prevalence by Race/Ethnicity Sacramento County vs. California, 2011**



Data Source: California Health Interview Survey 2001-2011 (CHIS)

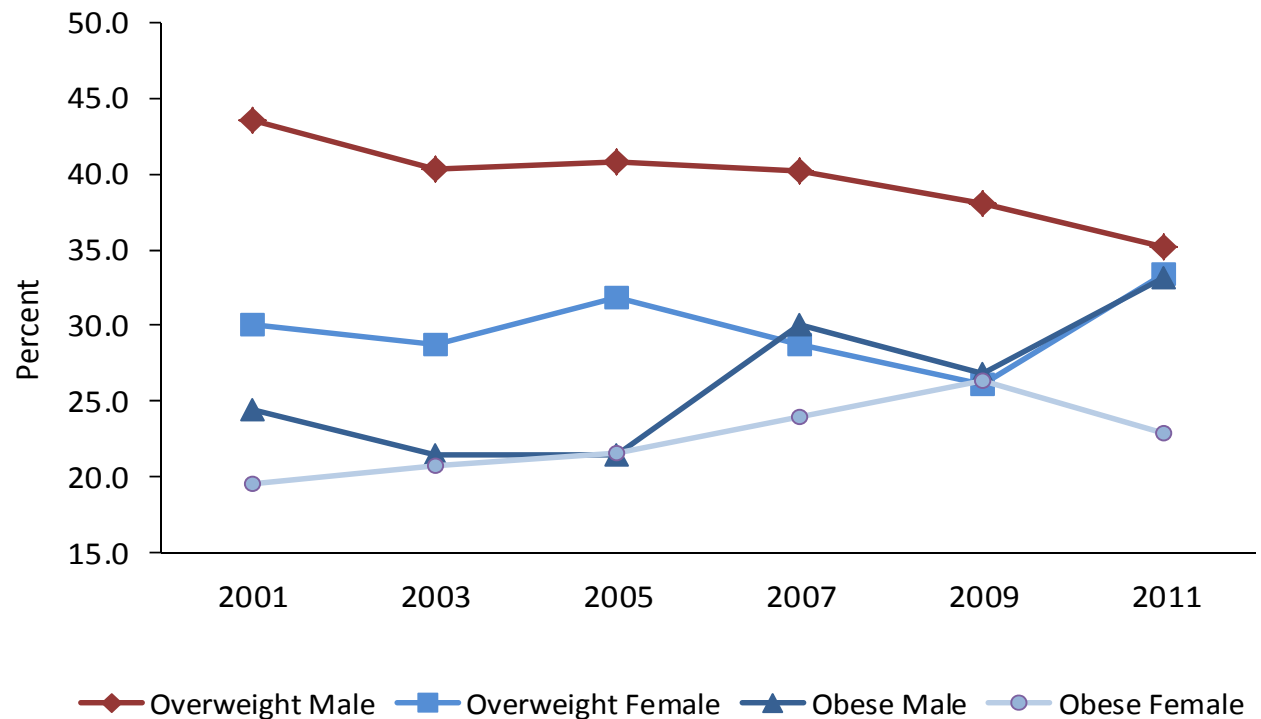


### Adult Obesity

In 2011, an estimated 295,000 (28.0%) adults aged 18 years and older were obese (Body Mass Index) [BMI] greater than or equal to 30) and 360,000 (34.2%) adults were considered overweight (BMI between 25.0 and 29.9). From 2001 to 2011, the obesity rate for adults increased by 28.4%.

Figure 41 shows that males had higher overweight rates than females across all years. In 2011, adult males had higher obesity rates than adult females.

**Figure 41. Prevalence of Adult Obesity and Overweight by Gender, Sacramento County, 2001-2011**



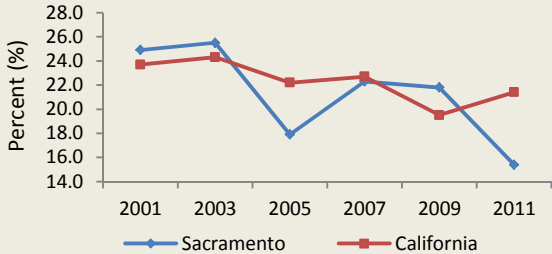
Data Source: California Health Interview Survey 2001-2011 (CHIS)

**Heart Disease**

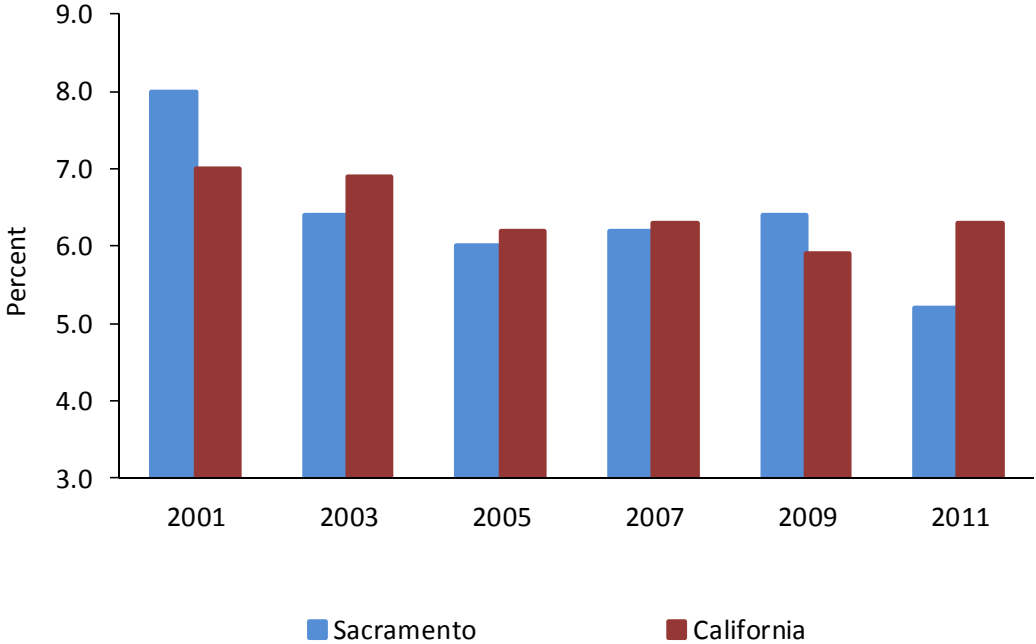
In 2011, an estimated 55,000 adult residents in Sacramento County reported living with heart disease. The prevalence rate for heart disease was 5.2% in Sacramento County, which was 17.5% lower than the State.

Heart disease prevalence for adults 65 and older decreased by 38.2% from 24.9 in 2001 to 15.4% in 2011. The heart disease prevalence rate for seniors in Sacramento County was 28.0 % lower than the statewide rate in 2011 (see the insert).

**Prevalence of Heart Disease for aged 65 and Older Sacramento County vs California, 2001-2011**



**Figure 42. Heart Disease Prevalence by Year Sacramento County vs. California, 2001-2011**



Data Source: California Health Interview Survey 2001-2011 (CHIS)

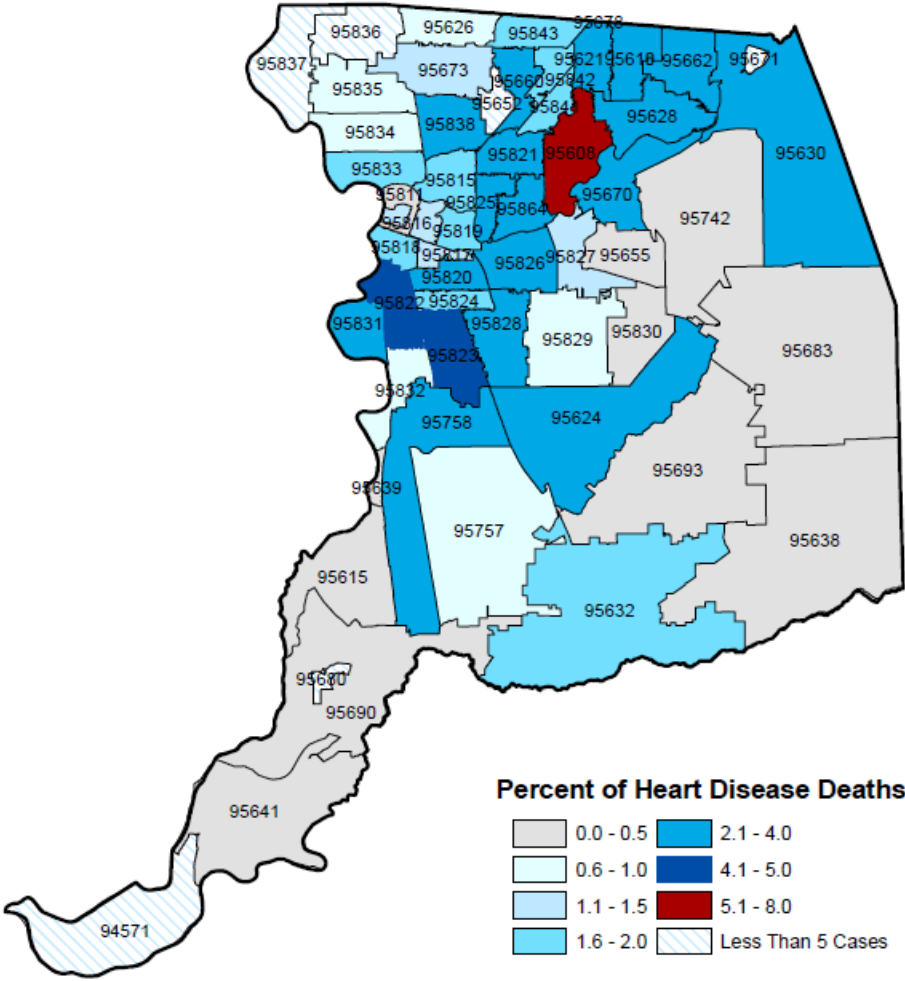
Heart Disease Mortality

During the last 50 years, mortality from heart disease has declined steadily in the United States. The Healthy People 2020 Objective is to reduce the cardiovascular disease (CVD) death rate by 20% from 126.0 in 2007 to 100.8 per 100,000 population in 2020. In 2011, the age-adjusted heart disease mortality rate for the County was 170.4 per 100,000 population.

In Sacramento County, heart disease deaths were primarily distributed in the following zip Codes: 95608 (Carmichael), 95823 (Sacramento) and 95622 (Sacramento) [Map 4].

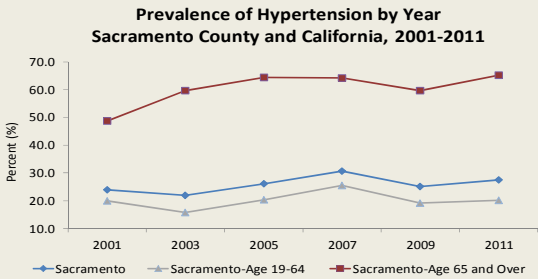
Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2007 through 2011

Map 4. Percent of Heart Disease Deaths by Zip Code Sacramento County, 2007-2011



**Hypertension**

From 2001 to 2011, the prevalence of hypertension for adults 65 and over was approximately 60%. The prevalence was three times higher than the other age groups.

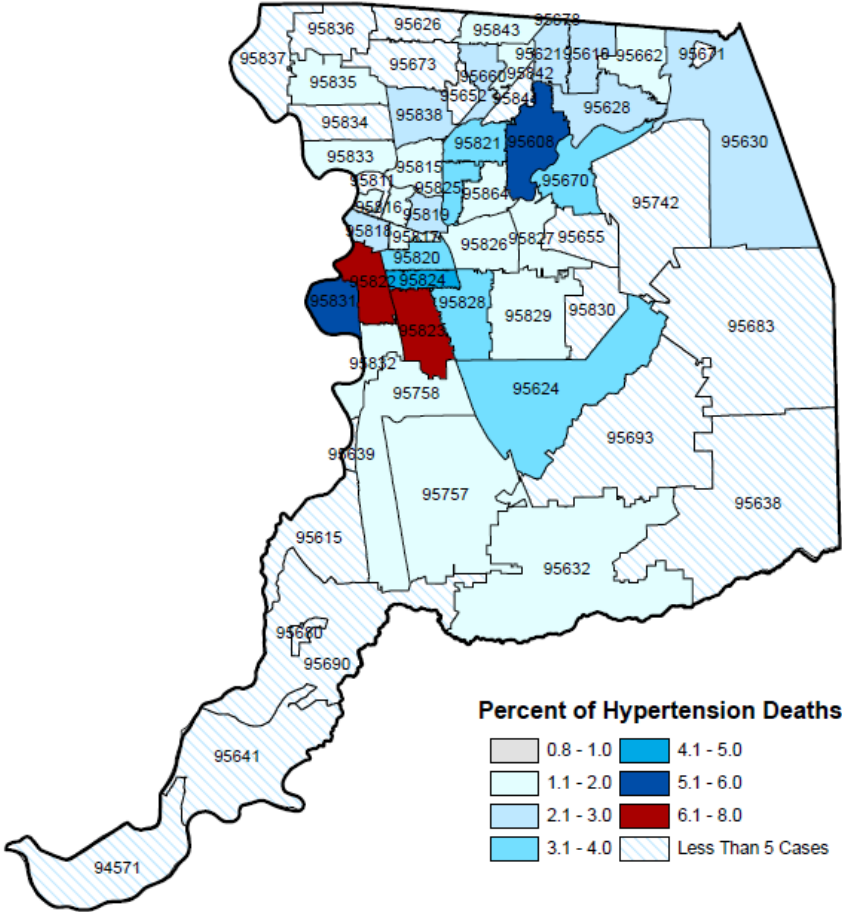


**Hypertension Mortality**

In 2011, the age-adjusted death rate for hypertension was 26.1 per 100,000 population in the County.

Hypertension deaths were primarily distributed in the following zip codes: 95608, 95823, 95622 and 95831 (Map 5).

**Map 5. Percent of Hypertension Deaths by Zip Code Sacramento County, 2007-2011**



Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2007 through 2011

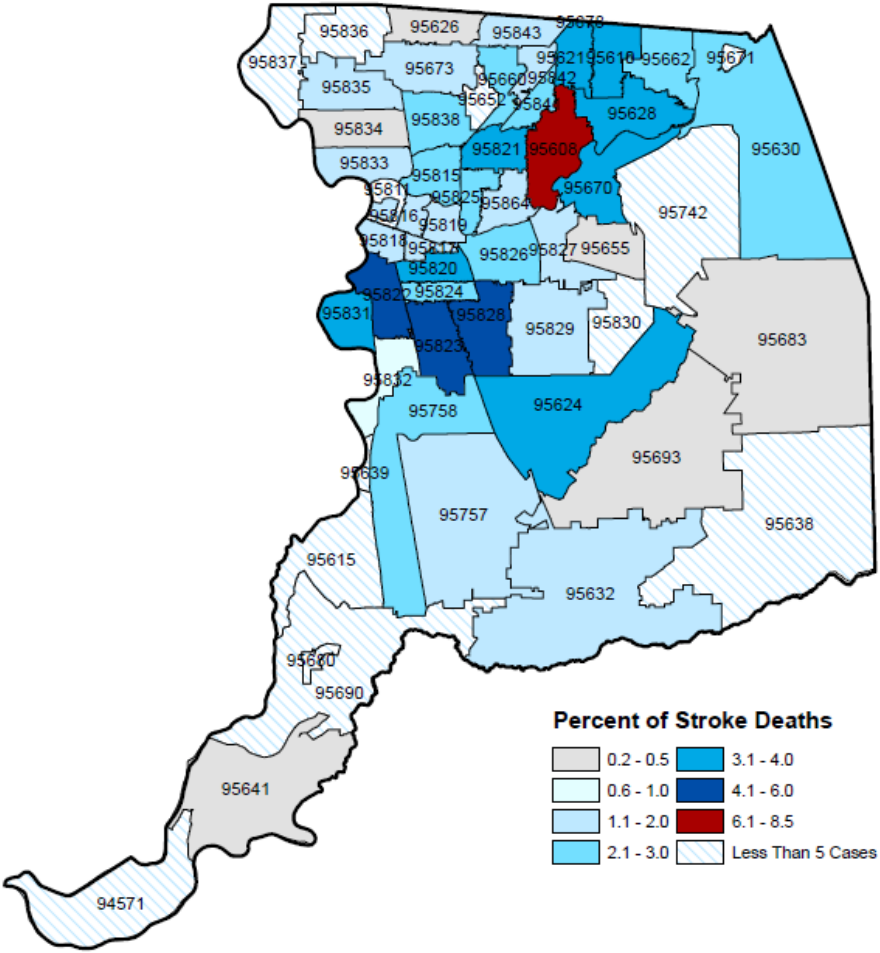
Stroke Mortality

In 2011, there were 540 stroke-related deaths in Sacramento County. The age-adjusted mortality rate was 38.4 per 100,000 population.

Stroke-related deaths were primarily distributed in the following zip codes: 95608 (Carmichael), 95822 (Sacramento), 95823 (Sacramento), 95828 (Florin), 95831 (Sacramento), 95624 (Sheldon/Elk Grove), 95820 (Sacramento), 95670 (Rancho Cordova/Gold River), 95621 (Citrus Heights), 95628 (Fair Oaks), and 95610 (Citrus Heights). [Map 6]

Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2007 through 2011

Map 6. Percent of Stroke Deaths by Zip Code Sacramento County, 2007-2011

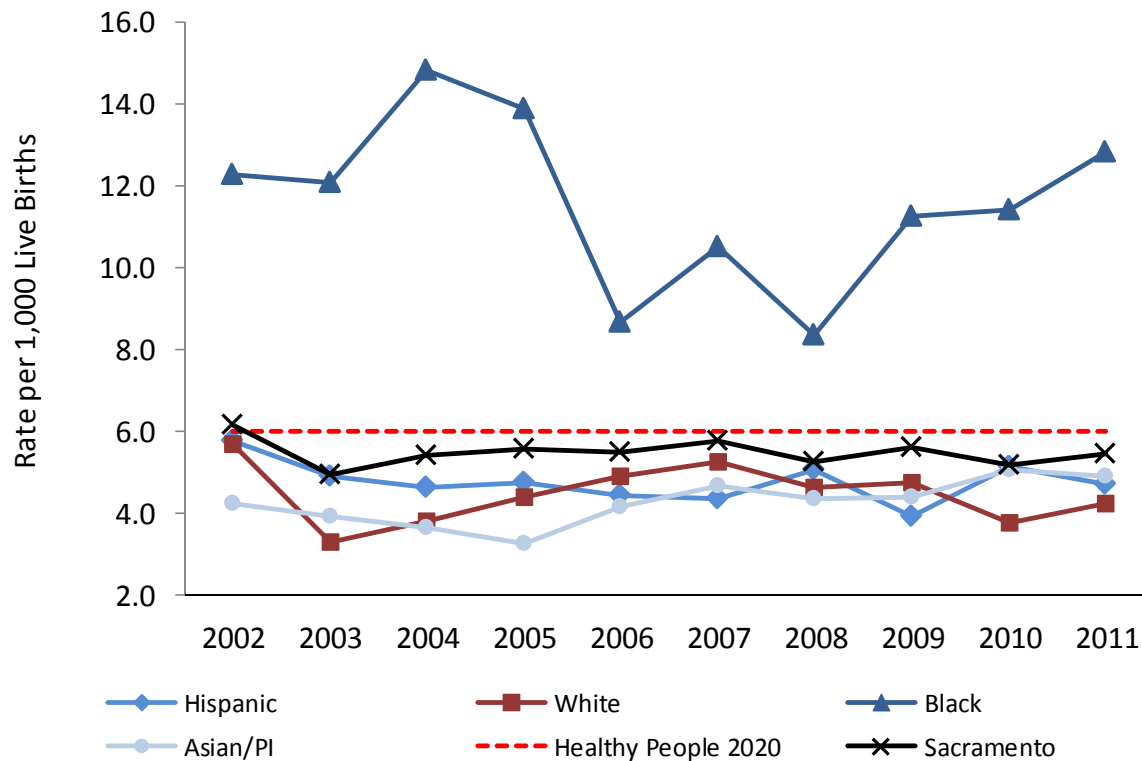


## Infant Mortality Rate

The infant mortality rate is calculated by dividing the number of deaths for infants less than one year of age by the number of births in the same year. The rate is per 1,000 live births.

Figure 43 shows the infant mortality rates for all racial and ethnic groups. Over the 10-year span, African American infants had the highest infant mortality rate. During the 10-year span, the infant mortality rate for African Americans was more than twice that of any other racial or ethnic groups and the Healthy People 2020 Objective (6.0 per 1,000 live births). Overall, Sacramento County did meet the Healthy People 2020 Objective for 2003 to 2011.

**Figure 43. Infant Mortality Rates by Race and Ethnicity, Sacramento County, 2002-2011**



Data Source: State of California, Department of Public Health, Death Master File

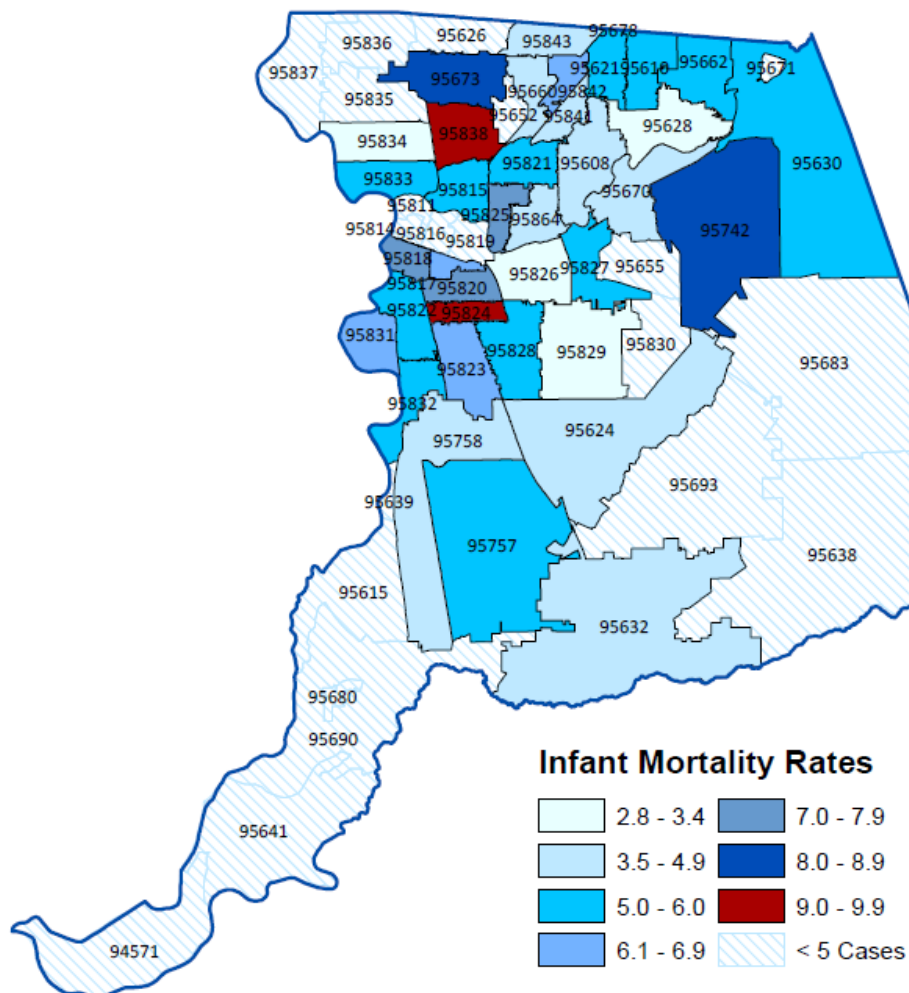
## Infant Mortality Rate by Zip Code

Map 7 shows the spatial distribution of infant mortality rates during 2007 to 2011. Zip codes 95824 and 95838 had the highest infant mortality rates, followed by zip codes 95742 and 95773. Zip codes 95825, 95818, 95820, 95842, 95823, 95831 and 95819 all had higher infant mortality rates than the healthy People 2020 Objective of 6.0 per 1,000 live births.

For the 10-year span, 2002-2011, the overall infant mortality rate decreased from 6.1 in 2002 to 5.5 per 1,000 live births in 2011.

Data Source: State of California, Department of Public Health birth and death master files for the Sacramento County 2007 through 2011

Map 7. Infant Mortality Rates per 1,000 Live Births by Zip Code, Sacramento County, 2007-2011





## Leading Causes of Infant Death

In 2011, the five leading causes of death for infants accounted for 66.1% of all deaths in Sacramento County (Table 7). Of the 109 total infant deaths, 26 (the largest number) were due to congenital malformations: 13 were neonatal deaths and 13 were post-neonatal deaths (neonatal is up to 28 days old and post-neonatal is less than one year old). 22 were due to prematurity and low birth-weight. There were 10 infant deaths due to Sudden Infant Death Syndrome (SIDS). Nine of these were post-neonatal deaths and one was neonatal.

**Table 7. Leading Causes of Infant Death  
Sacramento County, 2011**

Causes of Infant Death	Total Deaths	Neonatal Deaths	Post-Neonatal Deaths	Percent of Total
<b>Congenital malformations</b>	26	13	13	23.9
<b>Prematurity and low birthweight</b>	22	22	0	20.2
<b>Sudden infant death syndrome (SIDS)</b>	10	1	9	9.2
<b>Newborn affected by maternal factors and by complications of pregnancy, labor and delivery</b>	9	9	0	8.3
<b>Respiratory</b>	3	3	0	2.8
<b>Accident</b>	2	1	1	1.8
<b>Other Causes</b>	37	22	15	33.9
<b>All Causes</b>	109	71	38	100.0

Data Source: State of California, Department of Public Health, Death Master File



## Deaths and Death Rates

The total number of deaths of Sacramento County's residents increased by 9% from 9,578 deaths in 2002 to 10,443 deaths in 2011. During this 10-year period, the number of deaths in males increased by 464 deaths (9.7%) and the number of deaths in females increased by 401 (8.3%) deaths.

### Age-Adjusted Death Rates\* (see definitions on page 69):

From 2002 to 2011, the age-adjusted death rate fell by 9.8% from 800.0 per 100,000 population to 721.9 per 100,000 population. In males, it dropped by 11.5% (Table 8).

\*Rates are per 100,000 population, age-adjusted to 2000 U.S. Population Standard.

**Table 8. Age-Adjusted Mortality Rate\* per 100,000 Population, Sacramento County, 2002-2011**

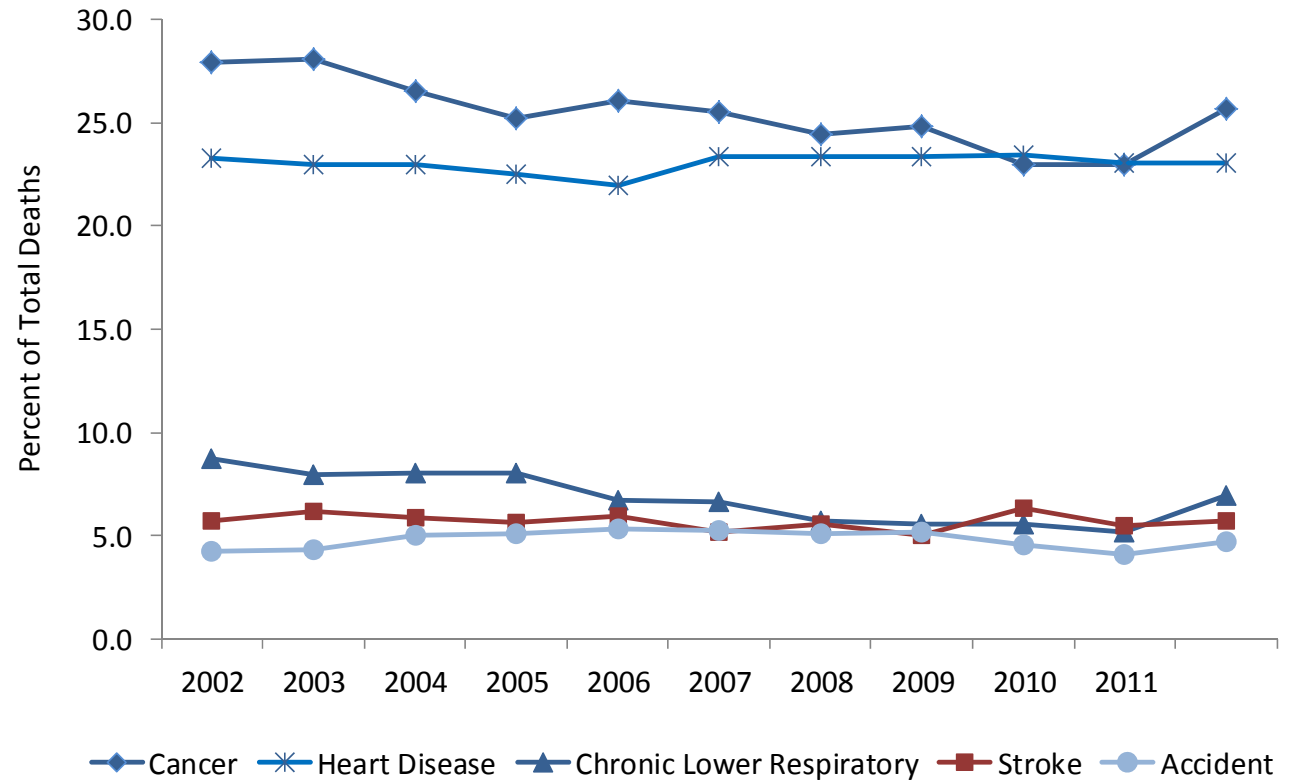
Year	Sacramento	Female	Male
2002	800.0	679.6	954.6
2003	793.6	669.3	958.8
2004	765.4	650.9	915.2
2005	795.0	679.4	940.1
2006	780.5	665.9	918.8
2007	723.3	621.0	851.7
2008	725.5	633.6	840.2
2009	705.8	608.4	827.6
2010	708.7	608.8	835.1
2011	721.9	621.2	845.0

Data Source: State of California, Department of Public Health, Death Master File

### Top Five Leading Causes of Death Trends over Time

Over the 10-year span, heart disease, cancer, stroke, Chronic Lower Respiratory Disease (CLRD) and accidents remained the top five causes of deaths across all years. From 2002 to 2011, the percentages of all five leading cause of deaths were reduced, but the percentages of cancer and CLRD deaths significantly declined, 17.9 and 40.8% respectively (Figure 44).

Figure 44. Percent of the Top 5 Leading Cause of all Deaths Sacramento County, 2002-2011



Data Source: State of California, Department of Public Health, Death Master File

## Top 10 Leading Causes of Death Ranking

Premature death is defined as death before age 75. Many of these are considered preventable. Cancer, heart disease, accidents, suicide and homicide were the top five leading causes of premature death.

Years of potential life lost indicate the burden sustained by society due to younger people dying prematurely. Accidents, suicide, homicide and liver disease rank higher in deaths among individuals less than 75 years old.

**Table 9. Leading Causes of Death, Sacramento County, 2011**  
**Total Deaths: 10,443. Total Deaths Before 75: 4,735**  
**90,795 Years of Life Lost Before 75 Years**

Leading Causes			Leading Cause of Premature Deaths***		
Rank	Cause of Death	Count	Rank	Cause of Death	Years of Life Lost
1	Cancer	2,406	1	Cancer	20,284
2	Heart Disease	2,396	2	Heart Disease	11,888
3	CLRD*	571	3	Accident**	9,538
4	Stroke	540	4	Suicide	4,825
5	Accidents**	425	5	Homicide	3,421
6	Alzheimer's Disease	384	6	Liver Disease	3,061
7	Diabetes	303	7	Diabetes	2,676
8	Influenza & Pneumonia	283	8	Stroke	2,634
9	Suicide	177	9	CLRD*	2,369
10	Liver Diseases	170	10	Influenza & Pneumonia	1,369

\* Chronic Lower Respiratory Disease (CLRD)

\*\* Accident (Unintentional Injuries).

\*\*\* Life lost before 75 years old.

Data Source: State of California, Department of Public Health, Death Master File

## Leading Causes of Death by Gender

In 2011, cancer and heart disease were the top two leading causes of death for both females and males, and accounted for 44.9% of deaths among females and 47.1% of deaths among males.

Table 10 shows the differences in leading causes of death for males and females: heart disease is the leading cause of death in the Nation and for males in the County but ranked second for females. Cancer is the leading cause for the females. In the U.S., breast cancer is the most diagnosed cancer in females but lung cancer is the leading cause of death from cancer in females (CDC).

**Table 10. Leading Causes of Death by Gender  
Sacramento County, 2011**

Females	Deaths	Rank	Males	Deaths	Rank
Cancer	1,209	1	Heart Disease	1,266	1
Heart Disease	1,130	2	Cancer	1,197	2
CLRD*	319	3	Accidents**	279	3
Stroke	317	4	CLRD*	252	4
Alzheimer	275	5	Stroke	223	5
Influenza & Pneumonia	155	6	Diabetes	155	6
Diabetes	148	7	Suicide	134	7
Accidents**	146	8	Influenza & Pneumonia	128	8
Hypertension	100	9	Liver Disease	111	9
Liver Disease	59	10	Alzheimer	109	10
All Others	1,357		All Others	1,374	
Total Deaths	5,215		Total Deaths	5,228	

\* Chronic Lower Respiratory Disease (CLRD)

\*\* Accident (Unintentional Injuries)

Data Source: State of California, Department of Public Health, Death Master File

## Leading Causes of Death by Race/Ethnicity

In 2011, heart disease and cancer were the two leading causes of death across all racial and ethnic groups.

There were some differences in ranking of causes of death by race/ethnicity. Stroke was the third leading cause of death for African Americans, Asian/Pacific Islanders, and American Indians/Alaskan Natives. The third leading cause of death for Hispanics and Multi-Racial group was accidents. CLRD\* was the third leading cause of death for Caucasians. Stroke was the fourth leading cause of death for Caucasians. Diabetes was the fourth leading cause for African Americans, Asian/Pacific Islanders, Multi-race and American Indians /Alaskan Natives (Table 11).

**Table 11. Leading Causes of Death by Race/Ethnicity, Sacramento County, 2011**

Rank	Caucasian	African American	Hispanic	Asian/Pacific Islander	American Indian Alaskan Native	Multi-Race
1	Heart Disease	Cancer	Cancer	Cancer	Heart Disease	Cancer
2	Cancer	Heart Disease	Heart Disease	Heart Disease	Cancer	Heart Disease
3	CLRD*	Stroke	Accidents**	Stroke	Stroke	Accidents**
4	Stroke	Diabetes	Liver Disease	Diabetes	Diabetes	Diabetes
5	Alzheimer	Accidents**	Diabetes	CLRD*	CLRD*	Stroke
6	Accidents**	CLRD*	Stroke	Influenza & Pneumonia	Accidents**	CLRD*
7	Influenza & Pneumonia	Hypertension	CLRD*	Accidents**	Hypertension	Suicide
8	Diabetes	Alzheimer	Influenza & Pneumonia	Suicide	Suicide	Alzheimer
9	Suicide	Homicide	Homicide	Alzheimer	Homicide	Influenza & Pneumonia
10	Liver Disease	Influenza & Pneumonia	Alzheimer	Parkinson	Liver Disease	Homicide

Data Source: State of California, Department of Public Health, Death Master File

## Leading Causes of Death by age group

In 2011, the top three leading causes of death for ages 1-14 years were perinatal conditions, followed by accidents and cancer. For the 15-24 age group, the leading cause of deaths were accidents; of the 37 accidental deaths, 67.6% (25) were motor vehicle accidents. Accidents were also a leading cause for the age group 25-44 years: of the 93 deaths, 38.7% (36) were related to motor vehicle accidents and 47.3% (44) were related to exposure to poisons. Cancer and heart disease were the top two causes for those 45 years and older.

**Table 12. Leading Causes of Death By Age Group  
Sacramento County, 2011**

Causes	#1 Cause		#2 Cause		#3 Cause	
	Cause	Deaths	Cause	Deaths	Cause	Deaths
<b>1-14 Years</b>	Perinatal Conditions	9	Accidents**	7	Cancer	6
<b>15-24 years</b>	Accidents**	37	Homicide	27	Suicide	14
<b>25-44 Years</b>	Accidents**	93	Cancer	86	Suicide	56
<b>45-64 Years</b>	Cancer	682	Heart Disease	406	Accidents**	131
<b>65-74 Years</b>	Cancer	568	Heart Disease	358	CLRD*	145
<b>75+ Years</b>	Heart Disease	1,578	Cancer	1,051	Alzheimer's Disease	360

\* Chronic Lower Respiratory Disease (CLRD)

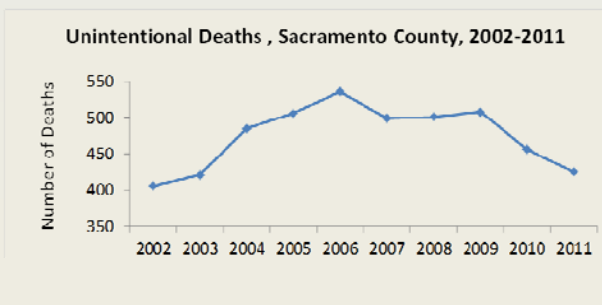
\*\* Accident (Unintentional Injuries)

Data Source: State of California, Department of Public Health, Death Master File

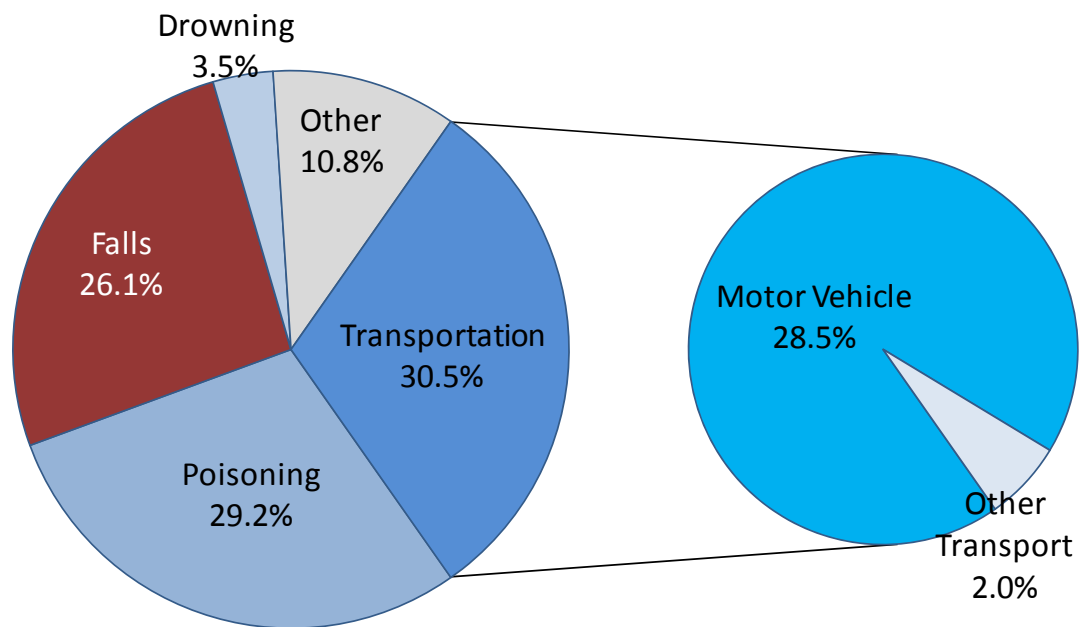
### Accidents (Unintentional Injuries)

From 2002 to 2011, the number of unintentional injury deaths increased 4.7% from 406 to 425. After 2006, unintentional injury deaths declined from 536 in 2006 to 425 in 2011, which represented a decrease of 20.8%. Transportation accidents were the leading cause of unintentional injury deaths in 2011, followed by poisoning (exposure to noxious substances) and fall-related deaths.

Of the 425 unintentional injury deaths in 2011, 129 (30.5%) were due to transportation accidents. Of those deaths, 93.8% were due to motor vehicle accidents (Figure 45).



**Figure 45. Leading Causes of Unintentional Deaths Sacramento County, 2011**



Data Source: State of California, Department of Public Health, Death Master File

## Intentional Injuries Deaths

There were a total of 263 intentional deaths in 2011. Of those deaths, 177 (67.3%) were suicides and 86 (32.7%) were homicides. The leading manner of suicide was use of firearms, which accounted for 32.7% of all suicides, followed by hanging, strangulation and suffocation, poisoning and exposure to noxious substances. The leading manner of homicides was also the use of a firearm, which accounted for 67.4% of all homicides. The second leading manner of homicide was assault with a sharp object, followed by hanging, strangulation and suffocation (Table 13).

**Table 13 Leading Manner of Intentional Injury  
Sacramento County, 2011**

Manner	Counts	Percent (%)
<b>Suicide</b>	<b>177</b>	<b>67.3</b>
Discharge of Firearm	67	37.9
Poisoning and Exposure to Noxious Substances	44	24.9
Hanging, Strangulation and Suffocation	48	27.1
Jumping from a High Place	3	1.7
Others	15	8.5
<b>Homicide</b>	<b>86</b>	<b>32.7</b>
Assault with Firearm	58	67.4
Assault with Sharp Object	11	12.8
Assault by Hanging, Strangulation and Suffocation	2	2.3
Other	15	17.4
<b>Total Intentional Deaths</b>	<b>263</b>	<b>100.0</b>

Data Source: State of California, Department of Public Health, Death Master File



## Alcohol- and Drug-Related Deaths

From 2002 to 2011, 3,867 deaths were associated with alcohol and drugs in Sacramento County. Alcohol- and drug-related deaths represented 3.9% of the deaths recorded during the 10-year period (Table 14). The number of alcohol- and drug-related deaths increased from 322 in 2002 to 405 in 2011. The age-adjusted mortality rate increased from 25.4 in 2002 to 26.8 per 100,000 population, in 2011.

**Table 14. Alcohol and Drug-Related Deaths, Sacramento County, 2002-2011**

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
All Deaths	9,578	9,744	9,634	9,949	10,016	9,542	9,791	9,770	10,048	10,443
Alcohol and Drug-Related	322	322	356	427	398	388	430	437	382	405
Percent	3.4	3.3	3.7	4.3	4.0	4.1	4.4	4.5	3.8	3.9
Age Adjusted	25.4	24.2	26.2	30.6	28.6	27.6	30.2	30.4	26.3	26.8

Data Source: State of California, Department of Public Health, Death Master File

Figure 46 shows the racial and ethnic distribution of alcohol and drug-related deaths over the 10-year period. Caucasians accounted for 71.9% of deaths followed by Hispanics and African Americans.

The age group with the largest number of deaths was 45-54 years, accounting for 35.5% of all deaths during the 10-year period (see the following pie chart).

Percent of Alcohol and Drug-Related Deaths by Age Group, Sacramento County, 2002-2011

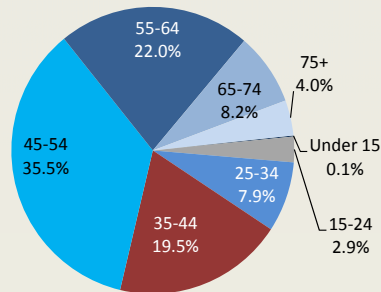
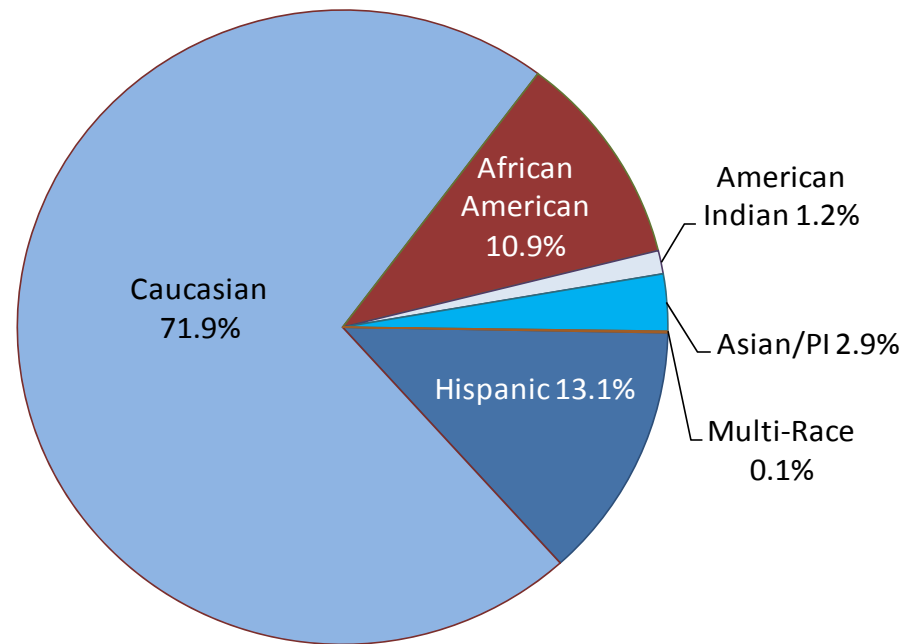


Figure 46. Percent of Alcohol and Other Drug-Related Deaths by Race/Ethnicity, Sacramento County, 2002-2011



Data Source: State of California, Department of Public Health, Death Master File

Nearly 40% of all deaths were associated with alcohol or drug poisoning; 14.5% were caused by mental or behavioral disorders and 9.7% were related to suicide

There were 1,160 alcohol-related deaths attributed to alcoholic liver disease (30.0%), of which 512 (56.6%) were due to alcoholic cirrhosis. Nearly 40% of all deaths were associated with alcohol or drug poisoning; 14.5% were caused by mental or behavioral disorders and 9.7% were related to suicide.

**Table 15. Alcohol and Drug-Related Deaths by Underlying Cause  
Sacramento County, 2002-2011**

Causes	Deaths	Percent
Total	<b>3,867</b>	<b>100.0</b>
Accidental drug or alcohol poisoning	1,530	39.6
Alcohol Liver disease	1160	30.0
Mental or behavioral disorder due to drug or alcohol use	559	14.5
Suicide	375	9.7
Undetermined intent	177	4.6
Alcoholic cardiomyopathy	34	0.9
Adverse effects of therapeutic drugs	17	0.4
Alcoholic gastritis	6	0.2
Homicide	3	0.1
Degeneration of nervous system due to alcohol	6	0.2

Data Source: State of California, Department of Public Health, Death Master File

**Causes of Death:** The standard diagnostic categories of the International Statistical Classification of Diseases Code the tenth revision (ICD 10) were used to identify the leading causes of death.

**Age-Adjusted Death Rate:** Age-adjusted death rates are used to compare relative mortality risk across groups and over time. These rates show expected mortality if the age distribution of population were the same. Age-adjusted rates are index numbers and cannot be compared to crude or other types of rates. The rate is calculated by dividing the total number of expected deaths in a standard population if the people in this population had experienced the same age-specific death rates as the population being adjusted to the total standard population. The rate is expressed per 100,000 population. In this report the 2000 US standard population is used.

**Birth Rate:** The birth rate is calculated as the number of births to a certain population (entire county, specific racial or ethnic group) divided by the total number of people in that population, and is reported per 1,000 population.

**Fertility Rate:** The fertility rate is defined as the number of births annually per 1,000 women ages 15 to 44 years.

**Health Disparity:** Health disparities adversely affect groups of people who have systematically experienced greater social and/or economic obstacles to health and/or a clean environment based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation; geographic location; or other characteristics historically linked to discrimination or exclusion.

**Incidence:** The number of new cases of disease or other condition that occur in a specified population during a given period.

**Infant Mortality Rate:** Number of deaths to infants under one year of age divided by the number of births in the same year. The rate is per 1,000 live births.

**Low Birth Weight:** Weight of a baby at birth less than 2500 grams (Less than 5.5 pounds).

**Prevalence:** The proportion of cases of a disease or other condition present in a population without any distinction between new and old cases. When used without qualification the term usually refers to the number of cases as a proportion of the population at risk at a specified point in time (point prevalence).

**SIDS:** Sudden Infant Death Syndrome (SIDS) is the diagnosis given for the sudden death of an infant under one year of age that remains unexplained after a thorough case investigation (i.e., autopsy, death scene exam, review of health status prior to dying and other family medical history). SIDS is the leading cause of death in infants between one month and one year of age.

**Social Determinants of Health:** The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.

**Teen Birth Rate:** The number of live births to females age 15 to 19 years divided by the number of females in the population age 15 to 19 years. The rate is expressed per 1,000 females ages 15 to 19 years.

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